



Opens with the Foot

**THREE THINGS YOU NEED**

FIRST: The only Sanitary method of caring for garbage, deep in the ground in heavy galvanized bucket with bail. Odorless, proof against rats, cats and dogs, or the smaller death dealing pest, the house-fly. Health demands it.

**UNDERGROUND GARBAGE RECEIVER
UNDERFLOOR REFUSE RECEIVER
UNDERGROUND EARTH CLOSET**

SECOND: This clean, convenient way of disposing of kitchen ashes, cellar and yard refuse, does away with the ash or dirt barrel nuisance. Stores your oily waste and sweepings. Fireproof, flush with garage floor.



THIRD: It supplies a safe and sanitary Easy to sweep into method to keep your water supply safe from pollution. It prevents the danger from the house or typhoid fly, around camp or farm, disseminating its poisonous germs to your family. Sold direct. Send for circulars on each. Nine years in practical use. It pays to look us up.

G. H. STEPHENSON, Mfr.
20 Farrar Street, Lynn, Mass.

A Camp Necessity

MOW YOUR HEDGE

Don't cut it; save time. The Unique Hedge Trimmer mows a 13 inch swath easily, evenly and quickly. Five days' work in one day's time. Hedge contractors quadruple their wages and profits. NO LOST MOTION EVERY MOVEMENT COUNTS. Every man can trim his own hedge in one-fifth of the time. Workmanship and material indefinitely guaranteed. If not satisfactory after one week's trial, can be returned and money refunded.

Sent prepaid on receipt of **\$5.00**

Refer to any bank in Philadelphia. Write for Booklet.

Fountain Cutlery Co., 927 Filbert St. Philadelphia, Pa.

THORBURN'S LAWN GRASS SEEDS

Containing a mixture of the finest grasses; Quart 25c. 2 quarts 45c. 4 quarts 80c. Sent prepaid by mail to any address in the United States. Dept. 2.

J. M. THORBURN & CO., 33 Barclay Street New York

SILVER LAKE A Sash Cord

(Name Stamped indelibly on every foot.)

The man who builds a house without asking about the sash-cord to be used is laying up trouble for himself. Insist that the specifications mention SILVER LAKE A. Its smooth surface offers nothing on which the pulley can catch. Guaranteed for Twenty years.

Write for Free Booklet.

SILVER LAKE COMPANY
87 Chauncy St., Boston, Mass.
Makers of SILVER LAKE solid braided cord for the floors.

The Practical Workman is Sure to know the Reason Why.

JAPAN BAMBOO STAKES

Strong, durable—can be used year after year. Do not decay like Southern cane or wooden stakes. Suitable for Roses, Gladioli, Lilies, Chrysanthemums, Pot and Herbaceous Plants.

	100	250	500	1,000
Green colored, 2 ft.	\$0.75	\$1.75	\$3.25	\$6.00
Green colored, 2 1/2 ft.	1.35	2.50	4.50	8.00
Natural case, 6 ft.	1.00	2.00	3.50	6.00

For the support of Dahlias, Tomatoes, Pole-beans, shrubs, young trees, we offer extra-strong stakes.

	12	100
8 ft. long, 1/2 to 1 in. diameter	\$1.00	\$7.00
	1.25	8.00

Full Bulb Catalog ready July 15th. Send us your name. Address **H. H. BERGER, Dept. 27, 70 Warren St., New York City**

**Talks to Sad People**

Are you melancholy, blue,
With no special reason for it?
With the summer coming too,
Do you shudder and abhor it?

Do you shrink at cheerful thought,
And at fun are you a scoffer?
Then for Heaven's sake you ought
To consult LIFE'S Special Offer.

127035
4/4/13

**COMING SPECIALS**

Boy's Number
Her Number
Coquette's Number
Bathing Girl's Number
Nicotine Number

At Any Newsdealer's
Every Tuesday
Ten Cents

"Washington is dead, Lincoln is dead and I'm not feeling very well myself, but—while there's LIFE there's hope."

Obey That Impulse

Avail yourself immediately of LIFE'S Special Offer, open only to new subscribers. Send One Dollar (Canadian, \$1.13; Foreign, \$1.26) at once and be a regular subscriber for three months. This offer is net. No subscriptions renewed at this rate.

Address LIFE,
14 W. 31,
N. Y.

PLAN YOUR NEXT SPRING BULB DISPLAY NOW**Darwin Tulips for the Permanent Garden Our Specialty**

There is no better subject for the PERMANENT GARDEN. Will last a lifetime; each year producing finer blooms.

OUR SPECIAL OFFER

One Each 25 Varieties (25 Bulbs) \$1.00

Catalog further describing these grand Tulips on request.

STUMPP & WALTER CO.

Desk A

50 Barclay St., New York





The Real Estate Department of House & Garden will be glad to advise its readers in regard
This service is given without charge. Address Real Estate

RIVER VIEW FROM A PHILIPSE MANOR HOME



A Mile on the Hudson

PHILIPSE MANOR

An ideal, restricted, year-round residence development, 26 miles from Grand Central Station—one mile above Tarrytown.

Sloping gently up from a mile of shore front, to a plateau-like eminence, every spot offers an inspiring sweep of magnificent river view.

Attractive New Homes

typifying the highest development of suburban architecture may be purchased on a mortgage basis of FULL COST of House at FIVE Per Cent interest.

Choice Plots—On Easy Terms

An exceptional opportunity is offered NOW to secure desirable locations at attractive prices. Building money furnished. Write for booklet and particulars. Address Department M.

*Ye Olden Philipse Manor (Erected 1683)
Now Open. First Class Catering.*

Offices at
Philipse Manor
White Plains

Cooley & West Inc.
Telephone Murray Hill 4430
331 Madison Ave., N. Y.

Offices at
Mount Vernon
New Rochelle



ONE MILE of waterfront on
Manhasset Bay—Sands Point,
L. I. R. R. Station, Port Washing-
ton, 35 minutes to New York.

Surrounded by the famous estates of
many distinguished citizens.

A HOMESITE WITH YOUR OWN PRIVATE BEACH

$\frac{1}{4}$ acre or more
in the most delightful and exclusive neighborhood,
with all improvements installed, for the right kind of
people at not too great cost.

Send for photographs.

S. OSGOOD PELL & CO.
542 Fifth Avenue NEW YORK



FOR SALE VERY DESIRABLE BUNGALOW SITES ON "BONNET POINT"

on the ocean at the mouth of NARRAGANSETT BAY, adjoining splendid bathing beach, surf, but no undertow, cool and bracing air, and very accessible; short distance from Narragansett Pier. If desired will supervise building of Bungalow. Reasonable prices. Further particulars from

G. N. TALBOT
34 Pine Street Tel. 6280 JOHN NEW YORK

Princeton

Handsome homes amid healthful surroundings—no manufacturing. Splendid old shade trees, wide streets, beautiful country on every hand. Fast trains to New York and Philadelphia.

Rentals \$300 to \$6,000 a year. Completely furnished homes also for rent.

Other desirable properties in town and country for sale or rent, furnished or unfurnished.

WALTER B. HOWE, Princeton, N. J.
New York Office, 56 Cedar Street

New York's Most Beautiful Suburb ARDSLEY-ON-HUDSON

By Buying RIGHT NOW you have an opportunity to secure an ideal villa plot, with grand old shade trees, high elevation, splendid view, five minutes from station, private wharf, club-house, tennis courts and golf course. Ardsley is an exceptionally high-class developed property restricted to private residences, forty minutes from Grand Central Station, with excellent train service; bargain for quick cash sale. BELSER, Room 1521, 115 Broadway, N. Y.

Property and Rent

to the purchase, sale or rental of country and suburban real estate in all parts of the country.
Department, House & Garden, 449 Fourth Avenue, New York City.



"Edgemont Estate" At Scarsdale Station

The ideal realization of out-of-town living. A delightful home community, for all-year residence. Protected social environment, the charm of the country, all city improvements. Immediately at station, only 19 miles, on Harlem Elec. Div. N. Y. Cent. R. R. Special advantages to be secured for those building during the present season. Write for Booklet A.

Scarsdale Company, Owners
J. Warren Thayer, Pres.

Scarsdale, N. Y.
Westchester Co.

503 5th Ave., N. Y.
Corner 42d Street

TIDEWATER VIRGINIA

Fine river-front plantations on the James and York rivers; 1,212 acres, with old Colonial house, \$80,000; 2,200 acres, \$60,000; 545 acres, \$20,000; 700 acres, \$12,000; 200 acres, \$12,000; 200 acres, \$5,000; 135 acres, \$3,500; also small farms either with or without water fronts. For particulars, address

DEVERELL & COMPANY
Claremont, Va.

FARM FOR SALE

Must sell to settle estate. 258 acres, all in cultivation. 51 acres in good woodland. Finely equipped, in addition to 80 ton Silo. 5 miles from Wilmington with 100,000 population. Price and description upon application. Send for free catalogue of other farms. Dept. 6, FORD & REIS, Inc., Wilmington, Del.

The Premier Broker in Country Property in the United States
National and International Real Estate Transactions
The Elites Patronage of the United States

GRANT PARISH



Special A4.—A classical Southern Estate; mansion of 25 rooms, modern luxury, costly buildings, 20 acres of land, fashionable locality and elite section, magnificent park of landscape gardening, forest, terraces. 15 minutes from town. Price \$60,000. Printed description. Special A3.—Gentleman's Country Estate, 40 minutes from "White House". 80 acres, large handsome brick residence, 16 rooms, commanding elevation, stately forest grove, delightful Southern all year home on the edge of Washington. \$25,000. Printed description. Country Estates de Luxe, residential domains, farms, plantations, elite villas, and marine estates in the aristocratic locations of the United States. Europe—Princely domains, estates, villas, apartments; town houses.

GRANT PARISH, 1429 New York Ave., Washington, D. C.

VILLA SITES OVERLOOKING THE TOWN OF BEVERLY AND MASSACHUSETTS BAY

Sixty acres for sale in lots as the purchaser desires.
For further details address

H. A. Wyckoff, 274 Clinton Avenue, Brooklyn, N. Y.



NOT "THE WORLD BEAUTIFUL"

but the most beautiful spot in Greater New York City is at Little Neck Hills, with its giant old trees, quaint old homesteads, and winding avenues. Its succession of beautiful hills slope to the south from Broadway, rising one above another till they overlook the far-famed Douglas Manor, Little Neck Bay, Connecticut, across the Sound, the sky line of Manhattan and on even to the Palisades across the Hudson. To see Little Neck Hills means that you will want your "House and Garden" there forever. Our prices are moderate and terms attractive and property perfect.

Dwight-Murray Realty Co., 47 West 34th Street, New York



Offered at 20% Below Value

AT GREENWICH, CONNECTICUT.

FOR SALE—15 acres, with lawns, woods, rose garden, truck garden, tennis court.

Large house. First floor—Large entrance hall, reception room, library, billiard room, dining room, butler's pantry, kitchen and maids' dining room. Second floor—Four masters' bedrooms, two baths, sitting hall, four maids' rooms and bath. Third floor—Three masters' rooms and two baths, extensive verandas.

Garage, stable with rooms and bath, greenhouse, gardener's cottage. For particulars apply

LAURENCE TIMMONS

Telephone 456

Opposite Railroad Station

Greenwich

Connecticut

IDEAL HOMES AND HOME SITES AT SHORT HILLS

IN NEW JERSEY'S MOST EXCLUSIVE COUNTRY RESIDENCE SECTION

Houses of unusual distinctiveness and individuality (completed or nearing completion) for sale; built by us under the direction of skilled architects of National reputation and specially designed for exposure, outlook and landscape effect. WE WILL BUILD FOR YOU, from your own plans, or you can build for yourself. HOUSES UNDER CONSTRUCTION MAY BE CHANGED in interior plan and finish to conform with your individual taste and requirements. Convenient terms of payment arranged.

Near BALTUSROL GOLF CLUB and CANOE BROOK COUNTRY CLUB. Invigorating mountain air, broad outlook, all advantages of refined country living with all conveniences of city life. Entire neighborhood carefully restricted. Forty minutes from downtown New York, express trains; two to fifteen minutes from station. Pure water, sewers, gas, electric light, sidewalks, macadamized roadways, etc. Property under development over five years with more than fifty fine homes occupied or building. Write for Information, Plans and Photographs, and Appointments to visit property.

ROCHE, CRAIG & WILEY

Suite 1303. 165 Broadway, New York, Phone 1546 Cortlandt





POULTRY DEPARTMENT

The purpose of this department is to give advice to those interested in poultry. The manager will gladly answer any troublesome questions. Address "Poultry Department" and enclose a self-addressed envelope.



ONE OF THE SIGHTS IN OUR PARK

We carry the largest stock in America of ornamental birds and animals. Nearly 60 acres of land entirely devoted to our business.

Beautiful Swans, Fancy Pheasants, Peafowl, Cranes, Storks, Flamingoes, Ostriches, Ornamental Ducks and Geese, etc., for private parks and fanciers. Also Hungarian Partridges, Pheasants, Quail, Wild Ducks and Geese, Deer, Rabbits, etc., for stocking preserves. Good healthy stock at right prices.

Write us what you want.

WENZ & MACKENSEN

Proprietors of Pennsylvania Pheasantry and Game Park

Department C. Bucks County, Yardly, Pa.



RABBITS AND PET STOCK

Unrivalled Flemish Giant, Angora, Tana and Polish Rabbits—Peruvian and Smooth Cavies for fancy or pets. Some Good Youngsters now for sale, \$1.00 up

ELM COVE RABBITRY, Great Neck, L. I.

BUFF ORPINGTONS



Are the Greatest Utility Breed

The 1st prize cock at Madison Square Garden, New York; also 1st and shape and color special at Boston, 1911; is but one of many fine birds of his same blood lines in my yards.

Stock and Eggs for Sale

"CHAMPION NEW YORKER"
The "Joe-Pye Book," 20 pages
Illustrated, sent on request



JOE-PYE
South Norwalk, Conn.,
R. F. D. 37

G. D. TILLEY

Naturalist

Rare Land and Water Birds

Swans, Geese, Ducks, Peafowl, Cranes, Pheasants, etc. I am the oldest established and largest exclusive dealer in ornamental birds in America.

G. D. TILLEY, Naturalist
DARIEN, CONNECTICUT



White Orpingtons

They lay like slot machines
Beautiful white chickens
for the lawn, as useful as
they are ornamental.

Lawrence Jackson
Box H, Haysville, Allegheny County, Pa.

WATER FOWL

Ornamental Birds of Every Description. Monkeys and Show Animals

LOUIS RUHE

248 Grand Street New York
Oldest Import House in the U. S.

Baby Chicks of Quality

SENT BY EXPRESS DIRECT TO YOU

Why bother with eggs? I can supply you with healthy young chicks at once and guarantee them to reach you in good condition. Fishel Strain White Plymouth Rocks, S. C. R. I. Reds and other breeds. Prices reasonable. Chick catalogue free.

R. C. Caldwell, Box 1030, Lyndon, Ross Co., Ohio

Maplecroft Rhode Island Reds

win at all the leading shows. "It pays to buy the best." Stock and Eggs for sale in large quantities. Send for Circular and Mating List of S. C. Reds. J. G. Dutcher, Prop. Address

Maplecroft Farms, Pawling, New York

Roofing the Poultry House

THE roof of the poultry house is a problem to the average poultryman solved by the state of his pocketbook, climate and the location of his buildings. In counting the cost, one must consider the possible expense in keeping in repair a roof cheap at the outset. Some roofs absorb the sun's rays to such a degree as to make the building too warm. In certain locations a fireproof roof is imperative.

Wood, metal and the tarred paper or felt roofing have peculiar qualifications which adapt them to individual requirements. The paper or felt roofings appeal to a great many people, as the work of applying the material can be done by an amateur. These roofings are laid on over boards and secured to position by nails, the joinings being made watertight with cement. Pliant roofings should be turned well over the edges of the roof and fastened securely. Allowance for lapping of the strips is made on the material and this lap should be observed. The cost of the cement and nails necessary for the work is included in the price of the roofing per roll. There are several good tarred roofings on the market at one dollar and eighty cents or one dollar and ninety cents per roll of about one hundred square feet. When buying, it is best to select those having a fireproof surface. Two-ply felt roofing is more economical than the one-ply, as it makes a much more lasting roof. After three or four years it will require repainting, and this must be done promptly to preserve the roof. The price of the felt roofings varies, costing from two to two and one-half dollars per square.

All flexible roofings must be laid over boards that are fitted closely, else they will tend to break over the crevices.

The galvanized steel and iron roofings are the most durable of all. The best grade of galvanized iron costs from four dollars and twenty-five cents to five dollars per one hundred square feet, covering the cost of laying, but as it is absolutely fireproof, lower insurance rates are obtainable on buildings where it is used.

The galvanized roof is very warm in summer, which is some sections proves an objection. Tarred paper also is hot.

Roofs of cedar or white pine shingles outlast the pliant roofings, and really cost less in the end. One poultry man who has had experience with metal, felt, paper and shingle roofing, prefers the last, claiming that it serves him best for least cost.

M. R. CONOVER



SANITARY brood coop for hen and chicks, 2 feet square with 3 foot covered wire runway; made of red cypress, painted two coats.

A fine setting and brood coop at low cost. Order 6 and save freight.

SATISFACTION GUARANTEED

over 150 illustrations) describe our high grade factory made goods. Potter Poultry Products are for Particular Poultry People. Are you—? Write to-day.

POTTER & COMPANY

POTTER POULTRY PRODUCTS

Profit makers for poultry keepers

CHEAPER, BETTER MADE, COMPLETE AND UP-TO-DATE, that's the record of Potter goods. You need them in your poultry business.

when you use Potter portable poultry houses (4 styles, all sizes), roosting and nesting outfits (3 styles, 12 sizes), hoppers, brood coops, colony coops, fireless brooders, feeds and supplies of all kinds. Our 2 catalogs (130 pages, Mailed for 2 red stamps to cover postage.

Box 77



\$8.50 Each
6 For \$50.00

SANITARY colony roosting coop for 50 growing chicks, 3 x 6 feet, 3 feet high; vermin proof. Fresh air front. Complete with 2 perches and floor. Made of red cypress. Worth \$1 more. Try 6 and be satisfied.

Downers Grove, Ill.

Colonizing Poultry

COLONIZING poultry is not a new idea, but a very old one. However, it is a reliable principle because it is based on the inexorable laws of nature. It was intended that fowls of all kinds should roam at will and live in flocks. These flocks should not be too large or too small to secure the best results and eliminate labor for the caretaker.

Colony houses, with or without a floor, with three sides and roof wind and storm proof, with one side facing the south, covered with netting and a door at the side, built large enough to accommodate at least twenty-five fowls, should be provided for the laying stock during the summer months. The location should be beneath a tree of considerable size, beside a bunch of bushes or in the edge of the woods, the idea being to secure for the flock protection from the sun. These houses should face the south and be located some distance apart to prevent the flocks from mingling.

The object in thus colonizing the laying stock is to give them a chance to partly feed themselves and secure in proper quantities green and animal food so essential to continued egg production. Better health and vigor are thus maintained and more eggs are thus produced than by any other system or method ever yet devised, for free range is an important factor to success in poultry culture.

Breeding stock thus colonized is productive of the very highest results in fertility and future growth and development in the chicks hatched from their eggs.

No better way has ever been discovered to raise chickens than by the colonizing plan. In flocks of twenty-five with unlimited range and houses large enough to accommodate them until near maturity they will grow like weeds. This plan is copied after the way in which the partridge rears her young. Open front houses approach the evergreen tree for roosting quarters. The growing chick needs lots of exercise and freedom. In small colonies he gets the things so essential to his best growth and development. A. G. S.

West Highland Terriers

THE alert little Scotch dogs known as West Highland terriers, are among the brightest dogs in the world, and they are a new breed in this country, for until eight years ago not one was known in the United States. Now several are owned by dog lovers, but they are not yet listed at the bench shows, which is strange, since these dogs are among the oldest breeds known to the dog world, and are among the gamiest specimens that sportsmen know.

They are almost exactly the same as the now well-known Aberdeen or Scottish terrier, save that they are always white in color. They are, perhaps keener and brighter than the Scottie, if such a thing were possible, and they have all his excellent points.

HAVE MUNSON-WHITAKER INSPECT YOUR TREES

Do it as a safeguard.

Make sure they are healthy—sure they are free from destructive cavities. Know this to a certainty. That is what one of our inspections guarantees to you. The preservation of the trees you have is surely of as great importance as setting out new ones

You wouldn't take several hundred dollars for one of your fine trees that has been years in growing; so by the same token, why hesitate on spending a few dollars for insuring its preservation?

So many give every possible care to their grounds in general, and then either neglect their trees altogether, or allow them to be mutilated by some good intentioned but unknowing men. Or, still more unfortunate, trust them to the numerous tree quacks who have recently sprung up like mushrooms, all over the country.

Successful tree work requires much judgment and skill. Every tree presents a different problem. With pruning, for instance, it's not only a question of how to cut off a limb—but one of judgment as to what limbs to remove to insure the health of the tree as well as contribute to its ultimate shapeliness.

Filling of decay cavities means more than simply digging them out and so filling them that the bark will "roll over the cement" patch—it involves a matter of judgment of how much



This historic old Andover Elm was nothing but a shell. It's a wonder how it ever stood up. We filled it with cement, pruned it, and chained up the limbs that were like to split down. Fifty years added to its life.

of the bark to cut away and how deep to dig out the cavity, to thoroughly check the decay.

No two trees present the same problem of chaining or bolting, to prevent splitting—it's a question of judgment based on experience.

If you want men of judgment, based on wide experience, to attend your trees—men in whom you can place your entire confidence—men who do every branch of their work in a thorough way—then we would like the opportunity of proving to you that we are the concern you are looking for.

You might, however, first like to know some of the things we have done and some of those for whom we have done them. We will be glad to tell you both.

We strongly advise an early inspection. One of our skilled inspectors can be sent at once.

Trees—The Care They Should Have—is the name of our booklet—it tells the very things you want to know.

Munson-Whitaker Company
FORESTERS

Boston—523 Tremont Bldg. New York—823 Fourth Ave. Bldg.
Chicago—303 Monadnock Bldg.



GLEN SUMMIT SPRINGS HOTEL

GLEN SUMMIT SPRINGS, P. A.

2000 FEET ABOVE
SEA LEVEL



3½ Hours from New
York via Lehigh
Valley R. R.

A MODERN HOTEL OF 200 ROOMS

Riding, Driving, Automobiling over 140 miles of magnificent roads. Boating, Bathing, Tennis.

BROWNE & Warburton, Proprietors



KENNEL DEPARTMENT

The purpose of this department is to give advice to those interested in dogs. The manager will gladly answer any troublesome questions. Address "Kennel Department" and enclose a self-addressed envelope.

Russian Wolfhounds

For beauty of form and disposition these Aristocratic dogs have few equals and no superiors. Their gentility, courage, strength, speed and loyalty are tried and true. Fit associates for child gentleman or lady.



Mirasol Kennels
Pasadena, California

Send your name and address to-day for a **FREE SAMPLE COPY OF DOGDOM** the oldest, largest and only high-class

EXCLUSIVE DOG MAGAZINE published. Fully illustrated. Printed on enamel paper. Beautiful original cover designs. Over fifty pages of dog advertisements each issue.

Price \$1.00 a year which includes three premium pictures 12 x 16 inches, nice enough to frame and suitable for den or study.—Address

DOGDOM PUBLISHING CO.
Battle Creek Michigan

PET STOCK MAGAZINE

devoted to

Poultry, Pigeons, Rabbits and all other kind of Pet Animals.

Illustrated, Interesting, Instructive.

Liberal commission paid to energetic agents. Write us.

Pet Stock Magazine, 18-20-22 Washington St., Springfield, Ohio

If You Have a Dog

You Should Read

FIELD AND FANCY

the only weekly in America devoted exclusively to the dog. Sample and Special Trial subscription Offer on application.

FIELD AND FANCY, 14 Church St., New York City



A HAPPY FAMILY

These Airedale Terrier Puppies are healthy as well as happy because they are fed on the right kind of food.

They are fed on **CHAMPION DOG BISCUIT** and this insures their health. Our food is clean and easy to handle when feeding. There is no moisture or dirt and it needs no preparation before feeding; just give the dog one or two biscuits and he will do the rest.

It is the ideal food to take along when going camping.

SEND FOR SAMPLE AND BOOKLET G

ST. PAUL BREAD COMPANY

558 View Street

St. Paul, Minn.

IRISH TERRIER PUPPIES

of both sexes. All from the very best stock.

For particulars address

CLOVERLY KENNELS

West Chester,

Penna.

GREAT DANES A SPECIALTY

Two choice golden brindle, tiger striped puppies of champion stock; straight heavy bone, typical, promising specimens. Pink of condition, ears standing, ready to go.—Address:

Rev. E. B. FOSTER, :: New Gloucester, Maine.

TOY WHITE FRENCH POODLES, young and grown stock. Pedigreed. Prices reasonable. Also Toy Spitz Pomeranian pups. Write your wants.

MRS. G. C. ROHDE,
Ann Arbor, Mich.



Boston Terriers

We have a number of exceedingly high-class puppies, sired by "Ch. Lord Bell Rock," and other prize winning lightweights, for disposal, satisfaction guaranteed.

For a house dog or companion, the Boston Terrier is in a class by himself. Prices from \$20.00 up.

WINCHESTER KENNELS
119 Winchester St., Toronto, Ont.
Ch. LORD BELL ROCK, at Stud, fee \$15

"DOGS IN AMERICA"

High Class Illustrated Fortnightly
Annual Subscription \$2.00

**COUNTRY'S RECOGNIZED AUTHORITY
ON KENNEL AND SHOW TOPICS**

When In Town Visit Our Library

809 Madison Square Building, E. 26th St., New York

AMERICAN KENNEL GAZETTE

The Breeders register in the Gazette has proved of great value, in view of the constant demand at the American Kennel Club for names and addresses of breeders. Write for rates.

AMERICAN KENNEL CLUB

1 Liberty Street

NEW YORK CITY

SHETLAND PONIES



An unceasing source of pleasure and robust health to children. Safe and ideal playmates. Inexpensive to keep. Highest type. Complete outfits. Satisfaction guaranteed. Illustrated catalogue free.

BELLE MEADE FARM
Box 19, Markham, Va.

In Hot Weather Feed

"Osoko"

The Paramount Dog Food. It will keep your dogs in condition.



MANUFACTURED BY

Spillers & Baker, Ltd., Cardiff, England

Send 4c. in stamps for Booklet and set of four colored post cards of prize dogs

H. A. ROBINSON & CO., epr. H, 128 Water St.
NEW YORK CITY

These white West Highland terriers are as desirable for pets as they are for sporting dogs and are especially gentle and docile with children, learn very quickly and make admirable trick dogs.

Wind, and weather make no difference, as they are essentially game and hardy. The coat is thick and strong and very wiry, having the same peculiar quality for shedding snow and rain that the Scottie's coat has. The little fellows are stoutly built, with deep chest and great bone and substance, and a very rough coat. They are dogs of pronounced character, and are never sneaky or mean, and make the finest of comrades for both young and old.

West Highland Terriers are great hunters by nature, and need only a slight training to make them most accomplished sporting dogs. They hunt rats, woodchucks, rabbits and even foxes—terriers having been known to shake the life out of foxes considerably larger than themselves. They are enabled to do this because of the great



The West Highland Terriers are as desirable for pets as they are for sporting dogs

power of their jaws and teeth, strong necks and compact bodies. They are especially famous as woodchuck exterminators, and New England farmers do not know how valuable such a dog would be to them, for there are few dogs that are successful woodchuck hunters.

These dogs rarely are ill, and they are so sturdy and hardy because they have not yet been in-bred or weakened by much bench showing. They seem to be immune to distemper or other dog ailments, and they are very neat and well ordered. Their photograph gives but little idea of their great attractiveness, for no lens can catch their alertness and sprightliness; they are all life and action, and the camera gives back only a still image. There is something so droll about their appearance that they attract everyone's attention. They have such short, stocky legs, such big heads and such shaggy, wiry coats that they are very odd-looking. There are no kennels breeding these dogs in this country, and very few in England, but in Scotland every other poor crofter may have a fine specimen. They are greatly beloved by the Scotch and most kindly treated by them, for the Scotchmen love the little animals' pluck and intelligence and loyalty. They go hunting with their masters and are of great assistance.

The Scotch grow to be deeply attached to these little dogs, and one man who owns several of them always has some story to tell of their intelligence. One of his dogs named Fiorag, which is Gaelic for squirrel, has a wise little trick which she plays when she wants to get a warm, cosy seat. She goes to the door and wags her tail as if she were begging to be let out, and when her master rises and goes to the door she darts past him and nestles down into the warm recesses of his vacated chair.

They have tremendous endurance, these little dogs, and it seems almost impossible to tire them. They are not heavy eaters, and not at all particular, but are just wise, wholesome, healthy, fine little dogs. Real "doggie dogs," as some one described them.

G. A.

The Woolly Aphis

I HAVE discovered a new kind of pest on my young apple trees (now 4 years old) which I am not familiar with, and write to ask if you can tell me what it is and how to kill it.

It appears on the branches, especially at the ends where they were pruned last season, in the form of a white, woolly substance and under the glass can be seen several grubs in each effected spot, which seem to come out of the wood itself. I have sprayed with arsenic and also petroleum emulsion, but without any effect.

If you can give me any information on the subject same will be greatly appreciated.

E. L. F.

In reply to your query, we would say that from the descriptions given in the letter the pest is probably the Woolly Aphis of the Apple. This insect is interesting because it has two distinct forms, one of which is found on the branches above ground and the other below the surface of the ground upon the roots. The root form is much the more serious one of the two. It lives upon the roots, sucking the juices from them and stimulating the tissues to produce swellings or galls. The roots finally decay, break away from the tree and eventually the tree dies as a result of the presence of this root louse. When this pest becomes well established in a young orchard it is exceedingly injurious.

Very good results have been obtained by hoeing away the soil in a circle about the tree to the depth of 3 or 4 inches. The diameter of the circle will vary, depending upon the size of the tree. It should be at least 2 to 3 feet in diameter for trees 10 to 12 years old. The ground in the circle should be soaked with a 15% solution of kerosene emulsion, using 2 or 3 gallons or even more to the tree. This material will penetrate the soil and kill great numbers of the aphids. In some cases it has held the aphids in check very effectually. After the emulsion is applied the earth should be replaced. This should be done only while the tree is in leaf; if done while the tree is dormant the roots are apt to be injured by the kerosene.

The branch form can be controlled by spraying with a 10% solution of kerosene emulsion or with whale-oil soap; one pound to 5 or 6 gallons of water.

The Key-hole in the Knob meets you half-way

Here's the Marseilles design for a front door—French Renaissance school. But there are over one hundred different Corbin Unit Lock designs in which knobs and escutcheons can be supplied.

Meeting every requirement for inside and outside doors, for residences, public buildings, hotels, etc.

The illustration indicates just how it would look upon your door. All parts attached to a solid cast bronze frame—imparting rigidity and strength—permitting a close and accurate adjustment of parts—affording smoothness of action in a safe lock.

Ask the Corbin dealer in your city. He will tell you all about the advantages of the Corbin Unit Lock.

Anyway write today for booklet

OK16, Corbin Wrought Hardware
OK17, Corbin Colonial Hardware
OK53, Corbin Princeton Design
OK80, Corbin Specialties

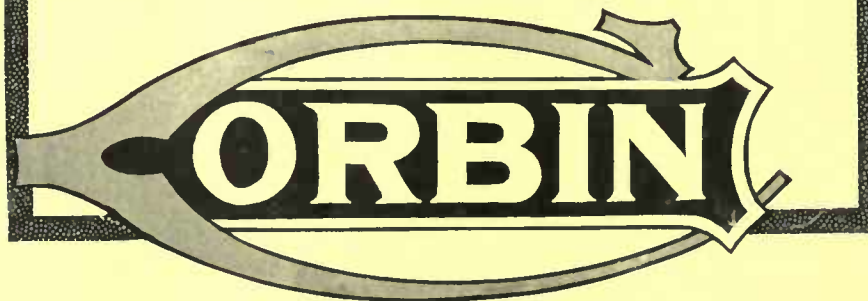
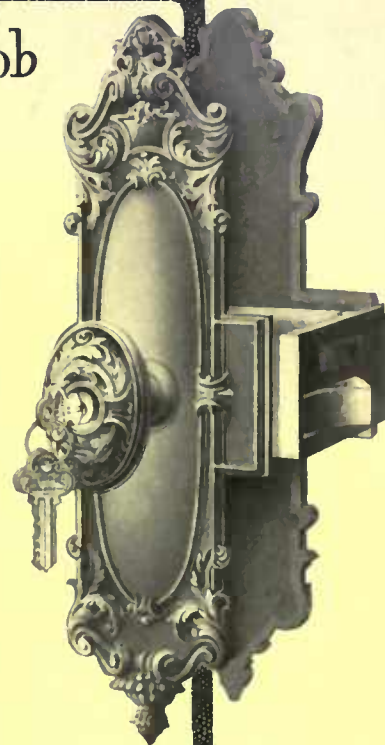
P. & F. CORBIN

NEW BRITAIN, CONNECTICUT

P. & F. Corbin
of New York

P. & F. Corbin
of Chicago

P. & F. Corbin
Philadelphia



Holland House

NEW YORK CITY

Fifth Ave. & 30th St.
Near Underground and Elevated
Railroad Stations



FAMOUS MANY YEARS

As the Center for the Most Exclusive
of New York Visitors

COMFORTABLY and LUXURIOUSLY

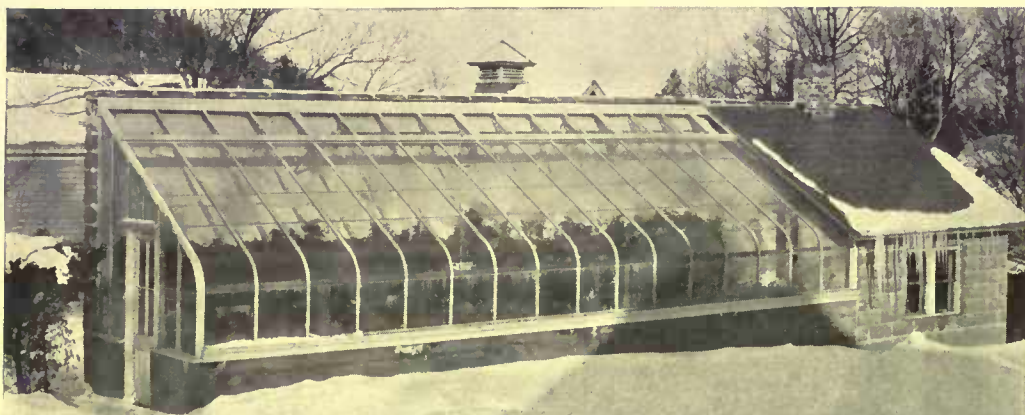
appointed to meet the demand of the
fastidious or democratic visitor.

Royal Suites.

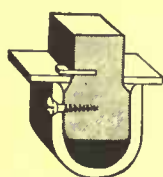
Rooms Single or En Suite.
Public Dining Room. New Grill.
Private Dining Saloon for Ladies.
After Dinner Lounge—Bar.

ALL THAT IS BEST IN HOTEL LIFE AT
CONSISTENT RATES.

Booklet, HOLLAND HOUSE, 5th Ave. & 30th St.



This U-Bar Leanto Greenhouse is in the Heart of the Adirondacks



This is the U-Bar
The Bar that makes
U-Bar Greenhouses
The Famous Green-
houses they are.

IT was fifteen degrees below when the photo was taken—and it looks it. Inside was a regular summer land with foliage plants, ferns, small palms, and endless flower and vegetable plants getting an early start for setting outdoors the first promising spring days. In sections like this where the season is short, unless you have a greenhouse it is next to impossible to have either flowers or vegetables before frost nips them off. For such purposes a Leanto house is a decided success. For a leanto, or any other kind of a greenhouse, the U-Bar construction has its distinct advantages. So distinct, so different is the U-Bar house that Uncle Sam granted us a patent. So that is why we are the only U-Bar greenhouse builders. The catalog both tells and shows the U-Bar superior points. Send for the catalog or send for us—or both.



The house is 33 feet long—this is a glimpse of but 16 feet of the interior.

U-BAR GREENHOUSES

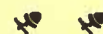
PIERSON U-BAR CO

ONE MADISON AVE., NEW YORK
CANADIAN OFFICE, 10 PHILLIPS PLACE, MONTREAL

Travel by Automobile

¶ An opportunity for
those who do not own
their own cars to tour

New England by Automobile



By special arrangement with a well-known tourist agency TRAVEL is able to announce automobile tours of New England covering all the important points of interest, including

The Berkshires
The White Mountains
Maine and Massachusetts
Sea Coasts
Long Island Sound

These tours are of twelve days, covering nearly 1000 miles entirely by automobile. New 1911 high-powered seven-passenger touring cars of a prominent make have been arranged for and private cars for five or six passengers will be provided. All expenses are included—hotels, shipment of baggage from point to point, etc., and patrons are relieved of every care and annoyance.

ROUTE OF TOUR New York to Poughkeepsie, along the Hudson; through Berkshire Hills to Pittsfield, Mass.; to Manchester, Vt.; east to Lake Sunapee; north up the Pemigewasset Valley to Flume; past the Old Man of the Mountains; through Franconia Notch to Bethlehem; south past Bretton Woods and Mt. Washington, through Crawford Notch, past Willey House, along the Saco River to North Conway; past Poland Springs to Portland, following the Maine Coast to Portsmouth; continuing along the Atlantic Coast to Boston; south along Narragansett Bay to Narragansett Pier, then along the coast to New London and on to New York.

DATES OF TOUR Leave New York City at 10:30 a. m. June 30th, July 14th and 28th, August 11th and 25th, and September 8th and 22nd. Leave Boston two days later, respectively.

TRAVEL BY AUTOMOBILE and see the country as you cannot in any other way

For full information and folder describing tours in detail with prices, address

AUTOMOBILE TOUR DEPARTMENT

Travel

McBRIDE, WINSTON & CO., Publishers
449 FOURTH AVENUE, NEW YORK

CONTENTS JULY, 1911



COVER DESIGN: A HOUSE AT ATLANTIC CITY, N. J.
Ford, Butler & Oliver, architects
From a photograph by Julian A. Buckly

CONTENTS DESIGN: TWO NATIVE SEDGES
Photographs by Nathan R. Graves

FRONTISPIECE: IN THE FOREST OF FONTAINBLEAU
Photograph by Thomas W. Sears, landscape architect

A LITTLE HOME IN A PEACH ORCHARD.....	11
<i>By Louise Taylor Davis</i>	
SUN-DIALS AND HOW TO MAKE THEM.....	15
<i>By William A. Vollmer</i>	
HOW THE JAPANESE ARRANGE FLOWERS.....	18
<i>By Bunkio Matsuki and F. W. Coburn</i>	
GETTING ACQUAINTED WITH THE JULY FLOWERS AND SHRUBS..	20
<i>By Henry H. Saylor</i>	
THE POSSIBILITIES OF HALF-TIMBERED HOUSES.....	23
<i>By Harold Donaldson Eberlein</i>	
GROW YOUR OWN FRUIT, V.....	26
<i>By F. F. Rockwell</i>	
SUGGESTIONS FOR WOOD FENCES.....	28
THE BIRDS AND BUTTERFLIES IN A SUBURBAN GARDEN.....	29
<i>By Zulma De L. Steele</i>	
BUILDING A HOUSE WITH A SLEEPING-PORCH.....	32
<i>By Maurice M. Feustmann</i>	
ACHIEVING CHARACTER IN REMODELING.....	34
<i>By Katharine Lord</i>	
SUMMER FURNISHING WITH CRETONNE.....	37
<i>By Sarah Leyburn Coe</i>	
THE ESSENTIALS OF THE MODERN KITCHEN.....	38
<i>By James Earle Miller</i>	
THE HOME OF MR. W. D. BLOODGOOD, HEWLETT, L. I.....	40
<i>J. Acker Hays, architect</i>	
INSIDE THE HOUSE.....	42
Curtains of Japanese Toweling To Prolong the Life of Leather Practical Bedroom Suggestions	
GARDEN SUGGESTIONS AND QUERIES.....	44
Hardy Ornamental Grasses	A Two-Year Garden
The Garden Water Supply	
INGENIOUS DEVICES	46
An Oven Convenience	A Home-Made Polisher
Knock-down Picture Frames	
West Highland Terriers	
Colonizing Poultry	
The Woolly Aphis	



VOLUME XX NUMBER 1

Copyright, 1911, by McBride, Winston & Co.

HENRY H. SAYLOR, EDITOR.

McBRIDE, WINSTON & CO.

449 FOURTH AVENUE,

NEW YORK CITY

Robert M. McBride, President; Robert F. MacClelland, Secretary; Henry H. Saylor, Treasurer. Published Monthly. 25 cents per Copy. \$3.00 per Year. For Foreign Postage, add \$1.00; Canadian, 50c. Entered as Second-class matter at the Postoffice, New York, N. Y.



IN THE FOREST OF FONTAINEBLEAU

There is a magnificent and inspiring object lesson for makers of country homes in America, in the way the older countries care for and reverence their trees. In acquiring sites for our country and suburban homes, we cannot keep too firmly in mind the fact that beautiful old trees form an asset the value of which it is difficult to overestimate



House & Garden



VOLUME XX

July, 1911

NUMBER I

A Little Home in a Peach Orchard

AN ARGUMENT FOR THE EARLY BUILDING OF A HOME OF THEIR OWN BY EVERY YOUNG COUPLE—WHAT HAS BEEN SECURED IN PENNSYLVANIA FOR \$2800

BY LOUISE TAYLOR DAVIS

Photographs by the Author and H. H. S.

ONCE the building of a house seemed to me a grave and weighty matter, by no means to be undertaken until the "parties of the second part" were quite settled in life and well on their way to affluence. Now I think that every young couple should, at the first possible moment, build them a house, be it ever so humble. Our own experience in house-building has brought about in me this change of mind.

Three years ago the time arrived, which comes to most married people sooner or later, when we felt that we couldn't stand boarding, we couldn't stand apartments, we couldn't stand hideous rented houses—in fact, we couldn't be happy unless we had a house of our own, built according to our own ideas. It was then we began seriously to consider building. The result is our home, small, but attractive, and exactly suited to our needs. The entire cost of the house was \$2,800, a price for which I knew a summer bungalow could be built, but which I had never realized would be sufficient for the building of a real house.

Our first idea, in fact, had been a bungalow in which we might live for seven or eight months of the year. It was at this juncture that the architect proved himself a benefactor. He advised us to build a comfortable, all-the-year-round house, and in reply to our solemn warnings promised to keep the price down to a bungalow figure. We were fortunate enough already to have a lot, which in itself was a great incentive to us to

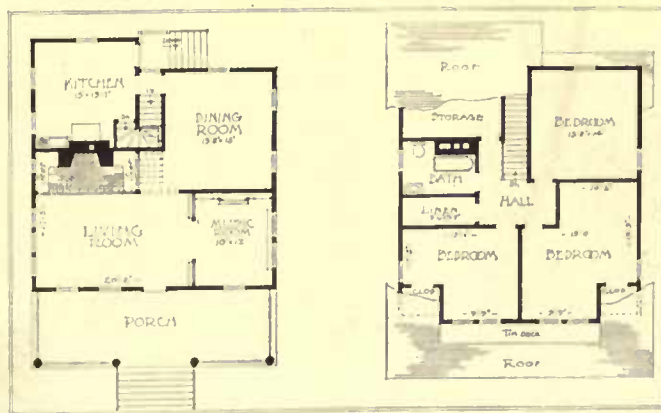
build. It was situated on the outskirts of the village, in the midst of a young peach orchard, which had been set out on the gentle slope of a hill covering about three acres. To my doubting mind, the middle of a peach orchard seemed a queer place to build a house, particularly as the trees were only two years old, and rather scraggly. I suggested that we remove those on our own

property, and plant in their stead the more conventional shade trees and shrubs. As I met with firm protests from my husband and the architect, I gave in, and today will gladly admit the superiority of the masculine judgment. The trees are now well grown and healthy, and furnish an amount of foliage around the house which it would have been impossible to obtain otherwise in the same length of time. As for the peaches they bear—well, those trees could only be removed now over my dead body.

This was not to be the only unconventional thing about the placing of the house. One end of the lot adjoins the street, or rather the country road on which is the trolley line connecting us with civilization. From the other end is a beautiful view of rolling farm country, with hills in the distance. The architect promptly decided that the house should turn its back to the street. The amount of ground which we really own is small, the lot being 50 by 200 feet, but with the wide landscape stretching for miles around us, and peach trees for our only near neighbors, we feel as if we owned an estate.



One end of the lot, 50 x 200 feet, adjoins the street, to which the house turns its back, giving the porch the splendid view over miles of country



The location of the stairs is an unusual feature of the plan; they were not in evidence from the living-room



Wide boards are laid up horizontally like clapboards on the wood frame over the underpinning of local stone. There is a splendid place for garden tools under the porch

The exterior of the house is quaint and unusual, with its small-paned windows and sharply sloping roof line, broken by the dormers which make possible the good-sized bedrooms. Wide boards are used in the construction, with a foundation of field stone, and a shingled roof. The house is painted white, with green trim, and the roof is stained red. The wide porch to me is one of the most satisfactory features of the plan. I have sat uncomfortably on many a porch where one's head seemed to press against the house and one's knees against the railing. On this porch, people may sit in groups, instead of in a straight and formal row.

The living-room is entered directly from the porch, and I must pause here to describe the front door. It is of the two-piece variety commonly known as the Dutch door—that is, the upper and lower halves open separately. It is made of five-inch oak planks, and chamfered, or beveled where the edges join. There are heavy battens on the inside, and the door is swung on rough iron barn hinges which run the entire width of the door and are painted black. An iron thumb-latch is used instead of a knob. The whole effect is of quaintness combined with great solidity.



In the dining-room, as throughout the first story, the second floor joists, closely spaced, form a very decorative ceiling

The living-room extends the whole width of the house, but is divided into the living-room proper and a little music-room by means of a partition which reaches only part way to the ceiling. The walls of the living-room, as of the entire house, are rough plaster, of a warm gray tone which makes a most successful background for pictures and pottery. The woodwork is cypress, treated with two coats of brown shingle stain, which allows the beautiful grain to be seen. The ceiling, both here and in the dining-room, is formed simply by the joists and flooring of the rooms above, left rough and stained the same brown. This was a treatment dictated by economy, but eminently satisfactory in effect.

The most striking feature of the living-room is the inglenook, which is opposite the front door, to the left as one enters. The wide chimney is made of the roughest brick the architect could find in a personal visit to the brickyard. This also forms the broad hearth, which is slightly raised above

the level of the floor, a plan which I think is good. It gives the ingle-nook a certain detachment from the rest of the room, which in the case in point proves very attractive.

We usually find visitors regarding our mantel-shelf with a puzzled expression, and hasten to explain that it is a railroad tie, left in its natural state, with the exception of an application of shingle stain. On each side of the chimney is a built-in settle. The wide seats are hinged to furnish convenient lockers underneath for kindling wood, and so forth—principally and so forth, as every housewife can testify to such tuck-away places. There must be one last and most important tribute to the chimney—it draws to perfection. I might mention here that the house is heated with hot air, which has proved very satisfactory.

The little music room, which is at the opposite end of the long room from the fireplace, is just large enough for a piano and some bookcases. It has a window which opens on the porch, and two casement windows set high in the other wall above the bookcases. These, by the way, were built in after we were living in the house. The disposition of a fairly large library was a serious question, which we solved by putting in shelves wherever there was a space



A glimpse of the living-room from the dining-room, showing the end screen of the inglenook and the location of the stairs



There is a wonderfully attractive atmosphere about the large living-room, with its dark-stained ceiling beams, rough-plastered walls, dark cypress woodwork, and the great inglenook, with its raised floor of rough brick. It is interesting to compare this room with the stuffy little front parlor of the modern development house, built fifty at a time at a cost no less than th's

for them. Besides those under the casement windows, there are shelves built against the partition between the living-room and the music-room; more shelves built under the three windows at the fireplace end of the room, and still others against the wall on each side of the chimney, above the backs of the settles. The shelves are home-made, constructed of odds and ends of lumber, and cost next to nothing.

The opening between living-room and dining-room is directly opposite the front door. An attractive feature of the division between the two rooms is the high back of the settle, the space above which is filled by square spindles set close together. The dining-room is comfortably large, for which I make my compliments once more to the architect. There was much more unbroken wall space here than in the living-room, and for a while we considered adopting some such treatment as a wainscot effect. However, when the furniture was



Looking towards the opposite end of the living-room, showing the music-room and at the left the dining-room. At the extreme right is the double Dutch door leading to the porch

in place, pictures judiciously hung, and shelves put up for pottery, the effect was so good that we decided to leave the walls as they were. In matters of house furnishing and decoration it is very easy to make the mistake of acting in haste and repenting at leisure. I am convinced that it is best to begin house-keeping in a new house with only the barest necessities in the way of furnishings, and devote a great deal of time and thought to the subject before completing the work. In this way one is much more apt to get things which

suit the house and seem an integral part of it—not like strangers in a strange land. For instance, I have a clock which occupied at least five different positions in the house for varying periods of time, while we vainly tried to persuade ourselves that it looked well. At last we decided that it didn't belong, and put it away on the top shelf of the linen closet, since when I have felt happier.

The placing of the stairs leading to the second floor of the house is quite unusual. They occupy a space just their width, between the dining-room and the kitchen, and are completely shut off from both rooms by doors at the foot. A small window, opening on the back porch, gives the necessary lighting. This was the only part of the plan which did not appeal to me in the beginning. I did not like the idea of guests having to pass through the dining-room in order to get upstairs. Now that I have lived in the house, however, I find that this small objection is far outweighed by a

number of advantages. A great deal of space is saved in the living-room by the arrangement, I am sure the house is warmer in winter for it, and the members of the family or the maid can go up and down stairs without disturbing callers who may be in the living-room.

The kitchen has windows on two sides, and the outside door on a third, an arrangement which has an obvious merit in summer. There is no provision made on the plan for a closet in the kitchen,

en, but we have supplied that deficiency by having a kitchen cabinet and shelves for dishes built in. These were included in the cost of the house. A thing I particularly like in the kitchen is the fact that the chimney bricks are not plastered over, but are allowed to show in contrast to the plaster of the walls.

Upstairs we have three bedrooms of comfortable size, a bathroom, and a large linen closet. Anyone who has seen only the exterior of the house finds this hard to believe, but the explanation lies in the

fact that there is absolutely no waste space in the house. Every inch, practically, has been utilized to good purpose, and I do not see how the given space could have been divided to better advantage.

The two bedrooms in the front of the house have roomy closets, while hooks in the linen closet supply the lack of this convenience in the third room. At the side of the house in the back which has no dormer, there is a large space under the pitch of the roof which serves as a trunk closet. In the bedrooms are found the same rough plaster walls and dark-stained woodwork as downstairs. The woodwork throughout the house is perfectly plain, and the doors are fitted with thumb-latches and bolts, instead of the usual doorknobs and locks. We have several times been on the point of tinting the bedroom walls, but as yet have not done so, chiefly owing to our inability to come to an amicable agreement on the subject of color. We have decided, however, that this is to be a thing of the very near future, as is the painting of the bathroom and kitchen walls.

We have planned a great many things for the future, but our plans now are chiefly concerned with the exterior of the house. Now that the interior is fairly complete, we have turned our attention to gardening—realizing painfully what might have been, if we had begun this work years ago.



A corner of one of the bedrooms—the one facing the road, as shown on the plan. Here, too, are the same rough-plastered gray walls harmonizing with the dark woodwork



Looking across the end of the house from the kitchen corner in the rear



A bookcase and press in white enamel is built across an end of the music-room



The size of your garden should not exclude the sun-dial. In this little English yard they have given the sun-dial the place of honor in a court of roses

Sun-dials and How to Make Them

THE MOST CHARMING GARDEN ACCESSORY OF ALL—HOW THE DIAL MAY BE LAID OUT FOR YOUR OWN LOCALITY—PEDESTALS AND WHERE TO PLACE THEM

BY WILLIAM A. VOLLMER

Photographs by Thos. W. Sears, N. R. Graves and others

WHEN the garden planning is all complete and each row has its proper relation to its neighbor, when the harmonies of color and form show forth the constructive unity of the artistic scheme, and bench and path are in the exact arrangement, is the work all done? Is there nothing more to do but the future weeding and spraying, the cutting and pruning? There is still one thing left out: the sun-dial. Whether the first thought or the last detail, it is necessary for completeness.

Somehow the dial is closely linked with gardens. Its very name conjures up the associations of the old-fashioned — not merely a past decade or century, but 'way back before man had ceased companionship with Nature. The sun-dial is the interpreter of the garden's divinity, the sun; or

perhaps the embodiment of its active principle which fosters life in the tiny seed-germ. We might repeat Lamb's question, "What a dead thing is a clock, with its ponderous embowelments of lead and brass, its pert or solemn dullness of communication, compared with the simple altar-like structure and silent heart-language of the old dial. It stood as the garden god of Christian gardens. Why is it almost everywhere vanished? If its business use be superseded by more elaborate inventions, its moral uses, its beauty, might have pleaded for its continuance."

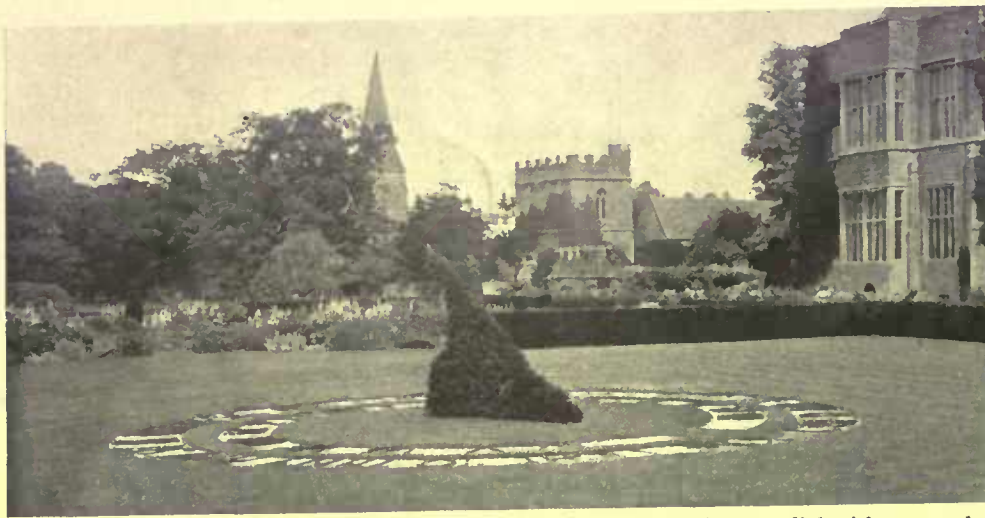
Not everywhere, however, has it disappeared, for the finer sentiments which garden-making nourishes have called it back to renew its message and preside once more over the realm of growing things. Nor does it come as a relic



A sun-dial with a millstone base that is simple and unpretentious



The dial is not merely decorative; it should be easily reached from the paths



A very attractive feature on some of the English lawns is the live sun-dial with numerals and gnomon of growing plants

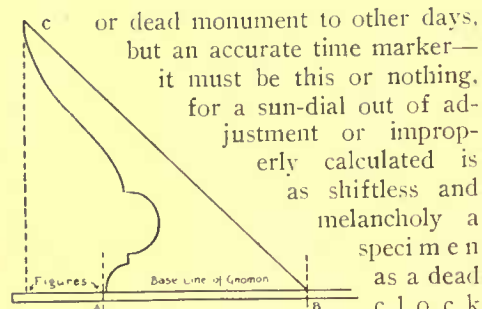


Fig. I. The plan of the gnomon, showing size in relation to dial-face

or dead monument to other days, but an accurate time marker—it must be this or nothing, for a sun-dial out of adjustment or improperly calculated is as shiftless and melancholy a specimen as a dead clock which points sadly to six o'clock at high noon. The impression that such a sun-dial is beyond the reach of modest income is erroneous. One need not travel to the older lands and pay fabulous prices to bring home one of doubtful history, for in the large cities here there are numerous places to buy them, from the simple horizontal ones to the great globes of absolute precision. Then, too, the hunter of the antique can often find a treasure to reward his search. But if time or money stand in the way, there is the opportunity of making one. Dial makers may produce more elaborate and finished works, but anyone can make a fairly accurate instrument and have the added joy of creating something.

Of the many different kinds of sun-dials, the horizontal style is the one most common to gardens. It lends itself most easily to garden decoration and its plotting is most simple. The directions given by the late H. R. Mitchell of Philadelphia for this sort of instrument are exceedingly plain, and will be sufficient for the beginner in dialing without further enlargement. With a rule, compasses and a protractor, these can easily be followed on paper and later transferred to the permanent material to be used for the dial.



The horizontal is perhaps the simplest of dials; there are some, however, of greater precision and ingenuity



The paradise rose, if kept low, is charming when planted at the foot of the sun-dial pedestal

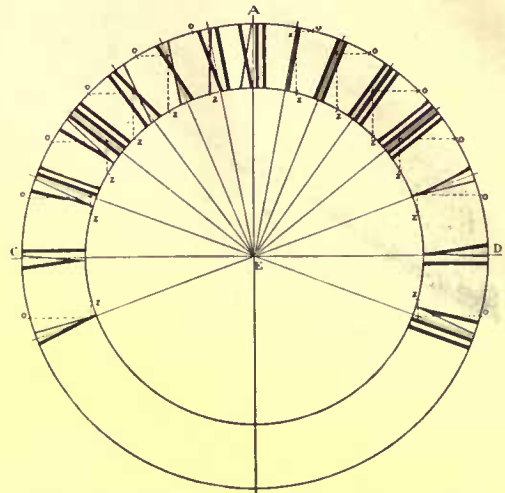


Fig. II. The first step in dial plotting, showing the method of locating the hour lines

The first thing to do is to lay out the gnomon—the triangular object which serves to cast the shadow. To do this one must know the latitude of the given place where the dial is to be used. For New York City, for instance, this would be $40^{\circ} 44'$ (about). Upon the base line describe this angle and continue it to C, a variable distance depending on the size of the gnomon desired. From C, a vertical line is carried to the base line, and the gnomon is complete in its simplest form. Since only the upper edge and sufficient base for support are needed, the foot can be shortened and the back cut away in any fanciful design, as suggested in the diagram. One thing worth mentioning at this point is that when the gnomon is cut in the permanent material, sufficient provision should be made to hold it firmly with the base line flush with the surface of the dial—such as with screws run vertically through the plate.

The next step is to lay out the face of the dial. This is shown in Figure II. Draw a horizontal line CD, and at its center erect a vertical. From the intersection E, as a center, describe a circle the radius of which will equal the length of the line BC in Figure I (the length of the gnomon's face). The points C and D upon the circle will be the six o'clock points made by the daily passage of the sun. Inside of this circle another circle should then be drawn whose radius should equal the length of the base line (from B to the dotted perpendicular from C, Fig. I). The two quadrants of the outside circle A to D and A to C next divide into six equal parts—indicated by o, o, o, etc. Do likewise with half of the inner circle and obtain the points z, z, z, etc. From each of the points o, o, o, etc., draw lines parallel to CD, and from each of the point z, z, z, etc., draw lines parallel to AE. Mark the points of intersection x, x, x, etc., and

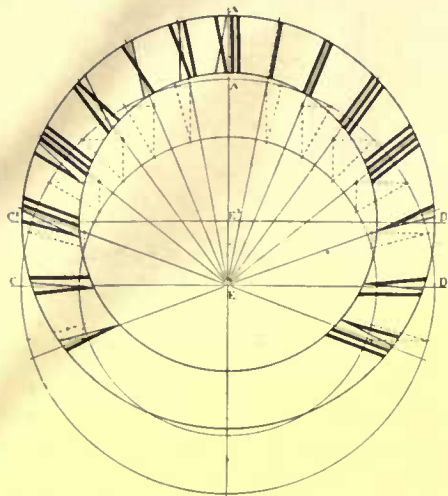


Fig. III. Final position of the proposed dial shifted to allow more space between the numerals

draw lines through them from the central point E. Where these lines cross the circles will be the hour points. In drawing the figures for the hours they should have the same inclination as the lines radiating from E. The half and quarter hours should be made in the same way by dividing the distance between the points on the outer and inner circle, and where the lines from E intersect will give the position for the half hours and quarter hours. The minutes, if one chooses to put them in, can be spaced off with the eye, as the distances to be divided are short. The lower half of the dial can be laid out in precisely the same manner given above and the hour marks extended to, say, four o'clock in the morning and eight o'clock in the evening; but for ordinary, practical use from six o'clock in the morning to six o'clock in the evening covers all that is needed.

In laying out a dial in this way, no allowance is made for the width or thickness of the stile or gnomon. If a thin gnomon is used, that is, of metal $1/16$ of an inch thick, it is scarcely necessary to make any allowance; but if a heavy gnomon is to be employed, having, say, a thickness of $3/16$ or $1/4$ of an inch, then, instead of the single line AE (Figure II), there must be two parallel lines the same distance apart as the thickness of the gnomon. In this case, an easy method would be to cut into two equal parts the preliminary diagrams we have been describing and to place between them a strip of paper the exact thickness of the gnomon to be used.

As the hours about the middle of the day are closer together than those early in the morning or late in the afternoon, it makes a much better looking dial to shift the center towards the twelve o'clock mark and to draw a new circle from this point (Fig. III).



Sun-dial pedestals bear sculpture, but only in the formal garden, and then only in harmony with the rest of the ornamentation



The completed dial worked in brass as it appears with the gnomon and hour lines in position



Placed at the junction of the garden paths, the sun-dial is framed in foliage and appears at its best

The lines radiating from E should be extended to this new circle and the gnomon increased in proportion. That the dial should give the best results, a practical rule for the length of the gnomon is that the upper tip of its sun edge be directly over the outer line of the border containing the figures of the hours (see Figure I). The center of the new circle should not be moved, however, from side to side, but must always be on the line AE midway between the two six o'clock points, as shown in Figure III.

With your dial planned, the question of materials is to be considered. Brass has the advantage of being very lasting, but perhaps demands more skill in marking than some other things. A smooth piece of slate can be had, however, of sufficient thickness to be durable. This is easily marked and decorated. Thomas Jefferson, who spent some of his leisure hours in plotting dials, worked them in slate, and at least one of them remains today. The modern discoveries in the practical uses of concrete offer a new field adaptable to the uses of the sun-dial maker. The lines, and even the gnomon, can be put in when the material is still soft and the numerals can be cut out of some metal, fitted with a key to hold them and let into the hardening substance.

The sun-dial is not complete without its motto. The quaint phrasing of many of them seems to signify the ever present voice of its daily service. There is nothing gloomy about a dial, and the often used lines reminding us that time is flying or that we must live while we have time, are *mal apropos*. It is not time that is flying, for time is permanent; we are moving, and the epicurean warning of the shortness of life is melancholy rather than full of the gladness of life. A dial on the

(Continued on page 48)

How the Japanese Arrange Flowers

AN ART THAT IN JAPAN IS TAUGHT TO THE YOUNGER GENERATION
AS WIDELY AS MUSIC IS TAUGHT TO OUR OWN SONS AND DAUGHTERS

BY BUNKIO MATSUKI AND F. W. COBURN

Photographs by Luther H. Shattuck

AMONG the many lessons which the domestic architecture of Japan, reserved, dignified and restful down to this day, offers to Occidentals, none is more unexpectedly suggestive than the one which is revealed by a little study of the Japanese art of flower arrangement or *ikebana*. It comes, indeed, with something of a surprise to the American to learn that the art of placing flowers or foliage in vases or elsewhere is taken seriously by every Japanese of taste and discrimination; that there are different schools and theories of flower arrangement; that peripatetic teachers of the art give lessons to the sons and daughters of middle-class families just as the piano and violin teachers go their rounds among us; that much of the wonderful skill of Japanese designers and pictorial artists is acquired through early acquaintance with the principles of artistic composition as taught by the exponents of *ikebana*.

The stranger within the gates of any cultivated household of Japan receives from the master of the house a tray of freshly cut flowers. His part it then is to place them so as to evince his taste, his understanding of honored traditions of decoration. On festal days in the great cities of the Empire shopkeepers remove from their windows the usual display of goods and show a single precious vase with some flower of the season placed in accordance with the canons of *ikebana*. The crowds surging the streets on such occasions praise or condemn the merchant's display with the discrimination of an audience at one of our symphony concerts or of the spectators at the opening night of one of our exhibitions of pictures.

Herein, then, is one of the secrets of the artistic power of the Japanese. The love of flowers is universal; these people, with their almost preternatural intelligence and sensitiveness to esthetic impressions, are practically alone in having rationalized the use of flowers and foliage in decoration. Occidental bad taste in the use of the most exquisite of natural forms has been manifested for centuries in a thousand ways; in the showy vulgarities of van Huysum, and other Dutch flower painters; in indelicate and un-

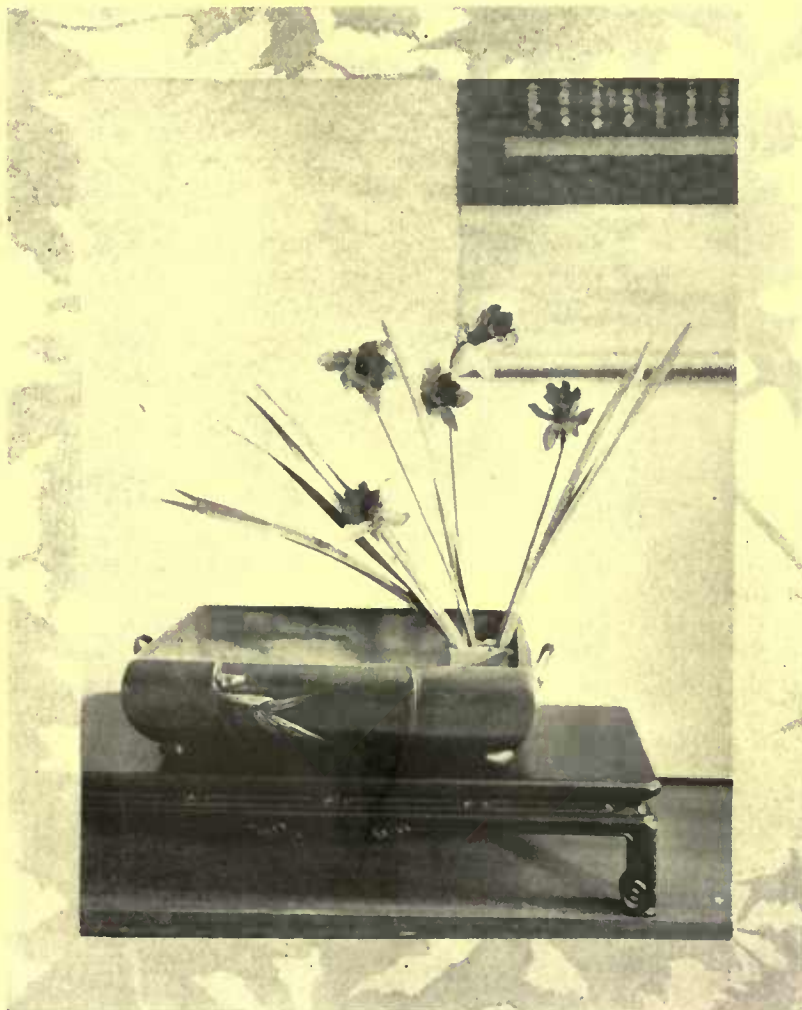
imaginative conventionalizations of floral forms in millions upon millions of yards of textiles and wall papers; in the tawdry display of expensive exotics with which the "swell" florist's window and the multi-millionaire's mansion are overloaded. In Japan flower arrangement has been one of the recognized fine arts since its canons were established by Yoshimasa, a distinguished artist of the sixteenth century.

This man laid down rules and precepts which, a little later, were amplified and refined by Rikiu, Hideyoshi's clever master of the tea ceremony. During all the later flowering forth of Japanese art, in the sumptuous development of the Tokugawa period, the marvelous pictorial efforts of the artists of the Ukiyoe, or popular school, down to the present day, when Occidental and commercial influences have greatly injured the architecture and allied arts of public buildings, but only to a slight extent the household art—in all this time all the Japanese people have kept reminding themselves of their expressive axiom: "Fruit nourishes the body; flowers, the soul."

To transfer the cult of *ikebana* bodily to this western land would be as impossible, however theoretically desirable it might be, as to change our more florid and assertive domestic architecture to the refined and subdued austerity of Japanese middle-class homes. Valuable instruction, nevertheless, it would be for any American

man or woman to sit at the feet of one of the Oriental masters of flower arrangement.

Such a student would soon feel that the essential ideas of the Japanese about flowers are right. There is a cult of floral forms that may be grown out-of-doors under strictly natural conditions. The forcing processes of the hothouse are distasteful even in present-day Japan, addicted to many innovations from the Occident. No follower of any school of *ikebana* would think of using a flower out of its proper season. In a semi-tropical country something is always in bloom, beginning with the January plum blossoms, which often appear simultaneously with snow flurries,



Five-flower arrangement, interesting variations of which are frequently sought by the Japanese who practise *ikebana*. Curious little forms and sculptured figures are occasionally used to hold the stems upright

and ending with the fall flowers which have hardly ceased putting forth in December. Nature and convention dictate the flowers which may be used at any season. An overblown rose or orchid from the greenhouse would be regarded as a monstrosity by the conservative and serious-minded members of a *samurai* family. Equally rational are the customs of handling the flowers taken from garden, field or roadside. Nothing is more abhorrent to the far Eastern mind than the so-called bouquet of culled flowers from whose stem the foliage, in whole or in part, has been removed. It is always remembered in Japan that flowers cut in the early morning last longest; that the character of the lotus and other water plants is best preserved by tying a string around the stem and cutting below the cincture; that rain water is always preferable to spring or well water for keeping the freshness of flowers.

To preserve indoors a suggestion of the relations of the individual flower to other flowers in nature is part of the Japanese convention. Grass flowers and tree flowers may be mixed, but only as they would occur out-of-doors. Both kinds, indeed, may be used in the vase, but one above the other. A perspective arrangement is held highly desirable, as with marsh flowers in front, mountain flowers behind. The reverse arrangement would be in bad taste. It is against the canons to combine three kinds of tree flowers or three kinds of grass flowers; but they may be brought together in the proportion of two and one or three and two. In certain circumstances four tree flowers and one grass flower, or vice versa, may be displayed together. Most often in the choice of flowers for a room, the single wall painting or *kakemono* is considered. It would be inadmissible to introduce a real flower which would compete with the same flower as depicted



An example of bad *ikebana*—one of the "seven diseases of flower arrangement." It is regarded as an artistic crime to utilize two stems of practically the same height and width



Flowers of the woods and of the meadows grouped in accordance with accepted principles of flower arrangement



The famous *ten-jin-chi*, or triangular arrangement symbolizing earth, man and heaven

by an artist. Should the *kakemono* contain pine trees a pine bough must not be displayed in the room. A plum blossom in the picture precludes the use of plum blossoms in vases unless in some unobjectionable way. The *tokonoma*, or alcove, which contains the picture of the day, is incomplete without its incense burner and flowers.

The vogue of Japanese arts in American cities has made most people in this country more or less familiar with the receptacles for flowers which are used in Nippon land. The vases are of bronze, pottery or bamboo. Hanging receptacles are employed, either swung from the ceiling or at-

tached to a post. It is a rule that a flower shall not seem to spring from the centre of a vase. Accordingly a little transverse Y-shaped wooden crotch, of the kind used by boys in this country in making sling-shots, is often inserted and the stem of the flower confined to the apex of the Y by a thin piece of bamboo. While flowers are welcome in the Japanese house, a profusion of them would be held barbaric. In *ikebana*, as in all else, simplicity is a prime consideration. Of the old-time dictator, Hideyoshi, it is told that while enjoying the peaceful life of the ancient capital of the Empire about 1580, he one morning visited Rikiu, master of the tea ceremony and disciple of the originator of flower arrangement. The artist's garden, as Hideyoshi noticed admiringly, was aglow with morning-glories. The ruler accordingly said: "Good sir, I should be delighted if you would invite me some morning to a display of your arrangement of these exquisite flowers. Call it your morning-glory tea party."

Rikiu gladly made his preparations for this event. On the appointed day Hideyoshi arrived, fully expecting to feast his eyes as before on a brilliant mass of flowers the while he enjoyed the tea for which Rikiu was celebrated. On

(Continued on page 50)



The Japanese pink (*Dianthus Heddwigii*) is a biennial blooming now if in its first season



You should know ten-weeks stock, an annual obtainable in pink, red, blue, lavender and purple



The African daisy (*Arctotis Grandis*) is a handsome annual with white petals and a gold circle about a steel blue center

Getting Acquainted with the July Flowers and Shrubs

AN INTRODUCTION TO THE MORE COMMON AND THE LESS KNOWN FLOWERS BLOOMING THIS MONTH SO THAT NEXT YEAR'S PLANTING NEED NOT BE BY NAME ALONE

BY HENRY H. SAYLOR

Photographs by Charles Jones and others

THE way in which most gardens are made is upon the merits of names rather than the merits of the flowers themselves. For, after all, the great majority of gardening amateurs start their activities early in the spring or late in the winter by ordering packets of seeds from the beguiling pages of a seedman's catalogue. Of course there are pictures in it, and in these days of photographic progress the pictures bear a very reasonable resemblance to the originals—ideal originals, to be sure, and better than most of us will ever grow, perhaps; but after all we must find no fault with high aims. Let us be thankful that the day of the woodcut catalogue is practically gone, for with it the question of whether an illustration represented "the finest improved spinach" or a new giant-flowering hollyhock" could be determined only by the relative proximity of the descriptive blocks of text matter.

The great bulk of the flowering plants, shrubs and vines, however, must necessarily go unprinted even in the modern catalogue, so that in making up his list the gardening beginner is forced to base his choice on his scanty knowledge of plants, or, lacking even that, upon the sound of the name itself. Thus it is that the demand upon seedsmen for such fascinating things as love-in-a-mist, amaryllis, asphodel, rosemary, love-lies-bleeding and marshmallow continues to be very heavy indeed, while other plants of less romantic names but of far greater practical value

and beauty to the garden remain comparatively unknown.

There is a far better and shorter road to a successful flower garden for the novice than that which lies directly through the seedsman's catalogue. It is a road leading through that same novice's own notebook. The time to get acquainted with the future inhabitants of that ideal garden of his is during the whole flowering season. If you yourself must acknowledge your novitiate in gardening, try this scheme of making the personal acquaintance of the month's flowering plants and shrubs. Surely in your own neighborhood there are gardens containing treasures with which you might easily become acquainted. Visit them with open eyes and an inquiring mind, and start your notebook now.

Rule it up with column spaces for common and botanical names, height, color, flowering period, location in sun or shade, for classification as to annual or perennial character, planting time for seeds or plants, for cultural hints from your neighbor's experience—which you will find him willing to dwell upon at length, and finally for a few informal descriptive remarks that will fix that particular plant once for all in your memory.

If your own neighborhood offers too few examples, visit a nearby nurseryman's place. That is where you will find a wealth of material for your notebook, with the additional advantage that you may order



The yellow day lily (*Hemerocallis flava*) will spread freely if given a sunny location and deep soil



This is tickseed, the perennial *Coreopsis Canadensis*. *Calliopsis* is the name given the annual *Coreopsis tinctoria*

Lavatera or annual mallow, two feet high, with a pink flower blooming ten weeks

You may meet the last blooms of the long-spurred columbine (*Aquilegia*), which takes kindly to shady places

plants or seed on the spot for delivery at the proper time in the fall or spring planting season.

Let me assure you that the following out of this scheme will save your many a mistake, many a disappointment in your garden-making. By it you will save at least a year or two in the attainment of a satisfying measure of success in your home surroundings. There is nothing so discouraging in the gradual acquiring of garden knowledge as to find, after a year or two of planting seeds, that the result is not at all what you have been led to expect by lurid word-painting in the catalogues or the still

less dependable choice of flowers on the strength of names alone.

Here are some of the really good things you will meet in your interesting travels. These are taken from those plants and shrubs that flower first this month, but there will be other entries in your notebook, recording flowers that started to bloom in May or last month. It must be borne in mind that any statement regarding a time of blooming can be only approximate. A dry season or a difference in latitude will change these dates by several weeks. The assumption is that we are investigating bloom in the latitude of New York. A rough rule is to allow a week earlier or later



Pick out now the varieties you want to plant next spring of the wonderful gladiolus

The gaillardia or blanket flower, a perennial bearing yellow-rayed flowers on long stems

You should know the pentstemon or bearded-tongue, with its long racemes of lilac or pale violet flowers



You will find the larkspur in both annual and perennial sorts; all need rich, well cultivated soil



The zinnia is an annual that is attractive only in its choice varieties; beware of magentas



The Japanese plume poppy (*Bocconia cordata*) makes an excellent screen for unsightly utilities

for each one hundred miles south or north of this. First, the perennials:

CARDINAL FLOWER (*Lobelia cardinalis*) is a plant giving one of the few pure red garden flowers. Native to some portions of New England, it can, however, be grown readily in nearly any soil. Shade about the roots and a slight winter protection is all it asks. The height is about three feet, and the flowers are borne in leafy racemes covering a foot of the stem.

CORAL BELLS (*Heuchera sanguinea*) is a lower-growing plant (1 ft.), with a low-spreading growth of leaves as a background

for the long nodding panicles of coral-red flowers not unlike the begonia. It requires a rich, deep soil, full sun and plenty of water when in bloom.

LILIES. There are several kinds of lilies that you may meet this month, and they are well worthy of your friendship: first the common tiger lily (*Lilium tigrinum*), with its red, purple-spotted flowers; then the wonderful gold-banded lily of Japan (*Lilium auratum*), perhaps the most beautiful of all, bearing flowers that frequently measure eight inches across, the reflexed petals spotted

(Continued on page 68)



In the pale pink shades the pyrethrum (*Chrysanthemum coccineum*) is a splendid perennial



Nicotiana is a bushy annual in white and red varieties with a delicious fragrance at night



Make the acquaintance of all the phlox you can find, including this annual variety, *P. Drummondii*

The Possibilities in Half-timbered Houses

SOME OF THE MANY WAYS IN WHICH THE DECORATIVE QUALITY OF THE EXTERIOR MAY BE ENHANCED—THE NEED ABOVE ALL ELSE FOR HONEST CONSTRUCTION

HEREDITY has had many a blame and many a credit laid to its charge; fortunately its shoulders are full broad to bear the burden. The weight of responsibility, therefore, will not be overmuch increased if we attribute to its influence the prevalence of certain architectural styles in certain places, and the choice of building materials or modes of construction, in preference to certain other modes and styles that may be intrinsically just as good. "Far-fetched and fanciful" you say? Not necessarily so. Heredity is unquestionably a determining factor in bird's-nest architecture, so why not in man's? Besides, for confirmation of this, we need but turn to American history. In New England, where there was a superabundance of surface stone, often loose and ready to use without quarrying or dressing—so much of it lying around that it was at times a positive nuisance—the people, nevertheless, generally built their houses of wood. In some of the middle and southern states, on the contrary, where stone was not nearly so easily obtainable, and where timber was, if anything, more plentiful than in New England, it was the prevalent custom to build of brick or stone. Why was this? Simply because the people of New England came mostly from the parts of old England where for genera-



A street of old half-timbered houses in Chiddington, Kent, marked by the overhang of upper stories—a characteristic feature

BY HAROLD DONALDSON EBERLEIN

[This article is the fifth of a short series in which the aim is to make clear the possibilities in securing distinctive character through an intelligent and painstaking use of the various building materials. The author wishes to give credit to Mr. H. L. Duhring, architect, for many helpful suggestions.—EDITOR.]

tions timber building had been the accepted rule, while the people of the middle and southern colonies came from where brick and stone were commonly used. Call this caprice, heredity, or what you will, the fact remains that a preference (which undoubtedly had a reason, as you will find all preferences have if you seek far enough) for one material in one place and another elsewhere, led to a selection oftentimes wholly inconsistent with the supply most plentifully, readily and, one may add, naturally available.

May not, then, this inherited preference account for the widespread latent fondness among us for the half-timbered house, so dear to many of our English forebears? Be that as it may—we will not force the point—the half-timbered house forms a distinct type of domestic architecture that has much to be said in its

favor. The Elizabethan era was the golden age of the English half-timbered house, although not a few such dwellings had been built before the reign of the Virgin Queen, and admirable examples of the type—far finer, some of them, than anything in England—were plentiful in the north of France before the Tudor period. With the economic conditions that made for the popularity of the half-timbered house we have no present concern. It



A modern half-timbered house at Essex Fells, N. J., with the typical diagonal end-braces and greater elaboration of timbering in the bays



A Cedarhurst, L. I., example, Barney & Chapman, architects, where the horizontality of the building has been accented over the brick base



Modern half-timbered houses in a group at Port Sunlight, one of the model English villages. The pins holding the timber ends together form a very decorative detail

suffices to observe that the style did then receive a great impetus resulting in numerous beautiful examples that our American architects have not been slow to avail themselves of.

The half-timbered house must be regarded not merely as affording a variety of applied wall surface treatment, but as forming a definite system of construction with fixed characteristics peculiar to itself. In the framework, which really constitutes "the carcass of the house," the "resistance of the timber, serving in turn as brace, or support, or belting course, is greatly increased by the multiple combinations of the joinery." Plaster or bricks are used to "pug" or stop up the spaces left between the timbers, so as to present a solid surface. It is unfortunately true that modern half-timbered work has sometimes degenerated into a mere applied surface treatment, and in such cases it is, to put it plainly, nothing

but a detestable sham. The way in which brumagem walls of masonry or framework are occasionally slicked over with stucco divided into panels by half-inch pine strips, tacked to the flimsy background and stained to look like weathered hardwood timbers, suggests an incident mentioned by an English writer. Passing down a back street in London, he noticed a card in a grocer's window bearing the legend, "Fine Jam, good straw-

berry flavor, 4d. a lb." He goes on to remark that it is not the "flavor of architecture" we want, but the real thing. Houses with a "half-timber flavor" are just as bad as glucose jam with fruit extract "added to taste," as the cook-books say.

A real half-timbered house is a source of lasting delight. It is not fireproof, of course, nor is it half a dozen other things that some folk think a house ought to be, but it is picturesque and human and homelike, and as to the fire, surely it is not amiss to trust a little bit to Providence and leave the fire insurance companies a chance to exist. Our insistence on fireproofing has become almost a mania to live in fireproof vaults. What we gain in safety we often lost in artistic merit and homelikeness, and certainly these features are worth considering as well as more utilitarian merits. Besides, a properly built half-timbered house can be made so slow-burning that there is but little danger of a conflagration, and that is really as much as can be said truthfully of many so-called fireproof structures. Then too, to the half-timbered house belongs a remarkable degree

of virility and vitality, coupled with a strong element of spontaneity that impresses one with the conviction that this type of dwelling is entirely in harmony with its natural surroundings. We realize also that the builders who perfected this style of architecture fully comprehended the qualities and properties of wood and applied methods appropriate to the material used. Limitations there are, one must admit, but then what kind of dwelling has not its defects? Such a house would be just as uninteresting, as repellent, as cold, as hard as a person without any faults or foibles. We love our friends the better for a reasonable share of shortcomings, and so it is with our houses. If they were absolutely perfect we should doubtless not be really happy in them.

On the score of durability we may point with satisfaction to numerous examples dating from the fifteenth and sixteenth centuries that are still whole and sound and apparently good for centuries to come.

A usual modification of the half-timbered style, in fact an



Stanley House, Chester. The carved timbering in the gable ends and the carved posts are noteworthy



Another group in old Chester. Half-timbered work loses all its charm when carried to such elaboration and with such meaningless forms

almost invariable one as far as we are concerned in America, is to build the lower walls of brick, stone or concrete and begin the timber work at the second floor, very often making it project somewhat in an overhang. Owing to essential principles of construction, certain arrangements of lines and habits of development were not only possible but almost inevitable, and devices that were first adopted from motives of expediency were retained because of their artistic worth as well as their practical value. This is notably true in the case of the overhang, which is a characteristic feature of half-timbered structures. Originating in all probability from a desire to gain additional space in the upper floors, it also afforded protection to the foundations and lower walls and at the same time served the purpose of a porch over the doors and a shade over the windows below. Successive overhangs supported on corbels and brackets swelled out story above story, so that some of the old four- or five-story town houses had a remarkably full-blown, ample appearance. In our modern half-timbered country houses, though not running above three floors, and generally not more than two, we can use this device of overhangs to good effect. This scheme is constructionally honest and, indeed, cannot be used with other materials. The flexibility and softening of outline thus attained are important considerations.

Before going on to speak of the external appearance of half-timbered wall surfaces, it is well to say that unless the wall be structurally genuine throughout, its falsity must sooner or later become apparent on the outside. "The big . . . beams, the brackets and the external and visible arrangement of the framework are at the same time a decoration, not accidental, but intentional, not haphazard but desired and aimed at." In other words, the half-timbered house, while constructionally honest is also decorative. Unless, however, stout timbers, fitly joined, perform the function they are ostensibly supposed to perform, they lose their significance and become merely grotesque.

Various methods of dividing up the wall surface by diverse arrangements of timbers may be adopted. The simplest and most



A modern country home near Philadelphia, Oswald C. Hering, architect, where the timbers are really structural, not mere strips nailed on afterwards

primitive uses vertical timbers resting on a sill. They may be placed close together, as in the house at Chiddington in Kent, so that there is but little space of plaster left between the uprights, or they may be placed farther apart as in the parts of the wall at the extreme right and left of the house at Essex Fells. The prevailing motive is perpendicularity, broken only by the sill beam carried across the face of the wall under the windows and by another horizontal beam in the front of the gables. This method of treatment, known as post and panel work, is substantial, and by the perpendicularity, which gives the effect of height, it is especially applicable on a very wide surface to reduce the width. The severity of this style may be relieved by crossing the timbers. When the beams are properly halved into each other and held at the ends by mortise and tenon, this treatment strengthens and stiffens the whole structure.

The effect of too great height may thus be readily obviated. Horizontal crossbeams have been successfully used in the Port Sunlight houses. On the side a diagonal beam crossing the vertical posts has a relieving effect. In the house at Cedarhurst also, the use of horizontal beams is almost wholly responsible for the pleasant decorative appearance which, with only vertical posts and panels, would

(Continued on page 51)



Brick was frequently used for filling in between the timbers, as here in the herring-bone pattern. When poor brick and other miscellaneous filling was used, it was plastered over



St. Werburgh's Street, Chester, showing the typical overhang and the use of carving on the main horizontal timbers



Grow Your Own Fruit

V. THE BUSH AND SOFT-FRUITED BERRIES—THE BEST METHODS OF CULTIVATION TO SECURE FINER FRUIT THAN YOU CAN BUY

BY F. F. ROCKWELL

Photographs by N. R. Graves and Charles Jones

THERE are two classes of fruit very seldom found of perfect quality in the home garden—the soft-fruited berries and the bush berries. If they are to be seen at all you will find them stuck away along some fence or in some corner, overgrown with a grass sod and covered about their roots inches deep with old leaves, twigs and decayed branches, and all the accumulating debris of years of neglect. All this abuse is simply because they will stand it, and still yield a meagre crop of small, poorly flavored fruit. Raspberries, blackberries or currants, grown under such conditions, are no more like fruit from the same vines or bushes properly cared for, than a wizened, acid, wild crab-apple is like a nice, plump, juicy Winesap.

This neglect can hardly be due to any difficulty in the way of the culture of these small fruits; for the amount of care they require each season, after once established, is much less than that demanded by the vegetable patch. It is simply that we have got into the way of letting them go untended, and taking it for granted that home-grown berries of these sorts must be far inferior to those we see for sale in the markets, when these frequently are the very same varieties simply given proper care. Far from its being impossible to grow good fruit of this sort in the home garden, it is particularly desirable to grow it there, because all the soft berries naturally stand transportation very poorly, and even if carried only a few miles in a wagon, become more or less mused and crushed from their own weight. The only way to have them at the very best is to grow them in the home garden; and when one knows how very few plants it will take, if properly treated,

to produce all one family will need, there is no excuse for not having them.

The soft-fruited berries—raspberries, blackberries and dewberries—are all treated in much the same way. Any situation where they get the full sun, and the soil is well drained, will answer. It may be at the side of the vegetable garden, or a narrow strip along a fence. If there is not room otherwise, they may be trained against the fence. If there is any choice as to soil, use that in which there is considerable clay.

The spot selected should be well enriched with old manure, and dug down to a depth of at least eight inches. The size needed can readily be decided, as the plants will require about four feet in the row and six between rows—some sorts taking a little more and some a little less space than this. The best time for planting is in early spring. Get your plants from a reliable nursery or seedsman, and have the ground ready to plant them immediately upon arrival. Set them in the soil an inch or so deeper than they have been grown in the nursery, working the earth in carefully and firmly about the roots. At the time of planting, cut the canes back to six or eight inches. These plants will not bear fruit until the following year; but if one wishes fruit the same year, it can be had by ordering extra plants, and setting these between the plants set out for the permanent bed. These extras are cut back only a little, leaving them about two feet high. They will bear fruit the same year as planted, but are not likely to do much the following year, so it is best to pull



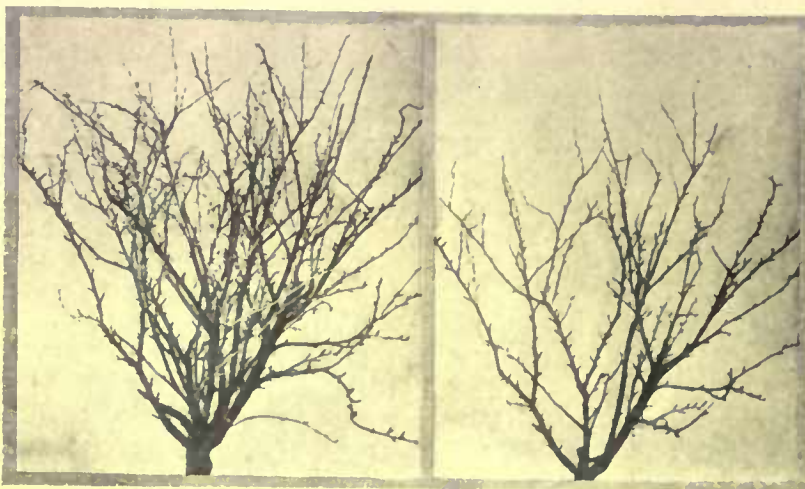
Blackberry bushes in bloom beautify the garden when well set out and supported

them up after the season is over. As the plants cost but a few cents apiece, this is not such an extravagant system as might at first appear.

After setting the plants out, do not neglect the bed, as success will depend very largely upon the thoroughness with which the surface soil is kept stirred to maintain the "dust mulch." At first it will be well to work the soil several inches deep, to loosen it thoroughly after the packing it gets while the plants are being set. After root growth starts, however, it should be loosened only on the surface, not more than two or three inches deep. In very hot seasons, a summer mulch of hay or spent manure will help retain the soil moisture, but weeds must be kept out.

There are three methods of giving the plants support. The one most commonly used is to have a stout stake for each plant, to which the canes are tied up with some soft material—raffia or strips of old sheeting. The second way is to string a stout wire the length of the row and tie the plants to this. An improvement on this method is to string two wires, several inches apart, one on either side of the row.

Another important matter is the pruning of the canes. The cane berries bear fruit on the growth of the season previous, and therefore it is necessary to cut out all old canes that have borne one crop. This should preferably be done just after the fruiting season, but is sometimes left until fall or spring. In the home garden, however, there is no excuse for thus putting it off. The new growth each year must



In pruning gooseberries and black currants, cut out all but a few stems. Keep the head open so that the air can reach every twig

new canes and side shoots one-third to one-half.

Winter protection is usually given in sections where the winters are severe—New York or north of it. The canes are laid down by bending over as flat as possible, and covering the tips with earth. This is not done until just before severe freezing weather. The canes are sometimes covered with rough litter; but bending

them down is in itself a great protection, as they will not be so much exposed to wind and sun, and will be covered with snow when there is any. Another method is to cover the entire canes with soil. Whatever mulch is used, it should not be put on until the ground begins to freeze, and should be taken off before any growth starts in the spring.

The Raspberry

The soil most liked by raspberries is clayey. It should be cool and moist, but never wet. The black and red types of raspberry are distinct in flavor, and both



Of the currants, Red Dutch, though older and smaller than some sorts, is hardier and less injured by the borer

also be cut out, as the plants send up more shoots than are desirable for best results. Cut out to the ground all but four or five of the new canes. The canes left, if they are to be self-supporting, as sometimes grown, should be cut back

should be grown. The red varieties should be planted about three feet apart in the rows, with the rows five feet apart; but for the blackcaps the rows should be six feet apart, and in rich soil seven will

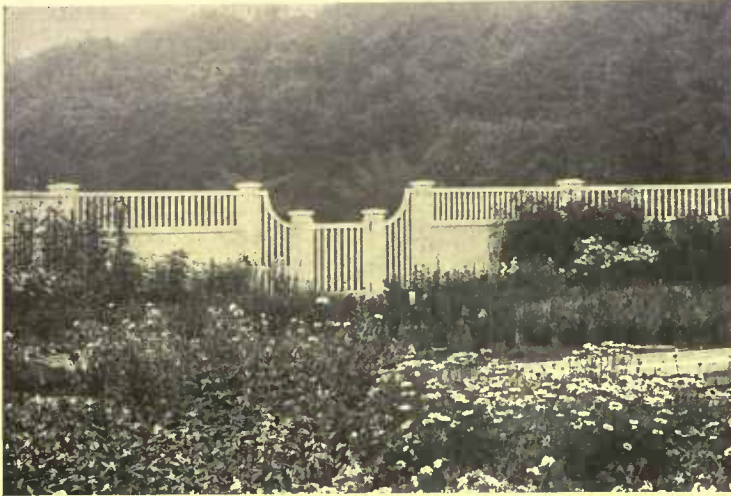
(Continued on page 54)



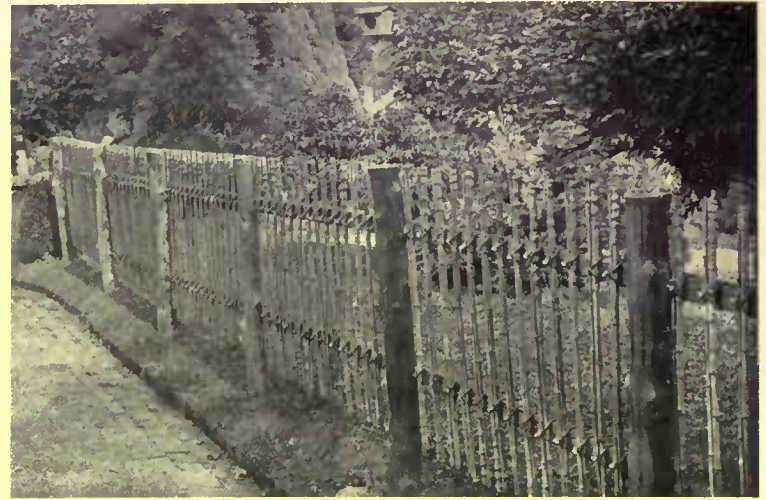
The little extra care in cultivation is worth while when one grows such blackberries as these



Cuthbert, though not quite as early as King, is one of the best varieties of red raspberry



There is no reason why the wood fence should ever be ugly. Such graceful, simple lines as this one shows give the finishing touches of beauty to the place



The ingenuity of the Japanese is here well taken advantage of in affording an economical, serviceable and attractive boundary. The posts are of stripped cedar with bamboo between

SUGGESTIONS FOR WOOD FENCES



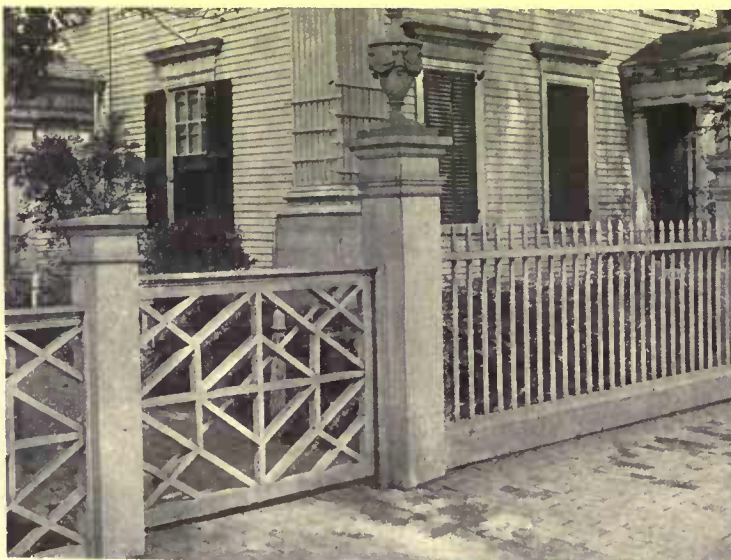
The European fence of moss green lath, so fitting with wooded places, might be better known



Nothing is in better taste with the formal garden than the fence of lattice work. The variety of its forms opens up a limitless field of really good design



A well designed series of openings along the top of a high board fence will redeem it.



The Colonial house has its special conventions for fence design. Here are two styles which harmonize with the detail



The sheaf pattern of these fence pickets is duplicated in the balcony rail, thus increasing the unified effect of house and grounds



This pretty yellow butterfly is a matured garden pest

The Birds and Butterflies of a Suburban Garden

HOW A DISH OF WATER SET AMONG THE FLOWERS MADE FRIENDS WITH THE BIRDS AND HELPED CAPTURE THE BUTTERFLIES—THE INTERESTING DOUBLE LIFE OF THESE INSECTS

BY ZULMA DE L. STEELE

Photographs by the Author



This was once the destructive cabbage worm (*Pieris Rapae*)

THE charm and attraction of a garden, be it large or small, is primarily, of course, the harvest of bloom and beauty which it yields; but aside from that, we have discovered that our little garden has been the means of bringing us many additional interests and pleasures.

It may be surprising, for instance, to learn how many birds and butterflies soon discover the allure-ment of freshly-worked soil, a drinking pool, and beds of honey-laden blossoms even though they be in the midst of a city.

Our custom has been to keep a large saucer of water in the yard for the birds, and we soon discovered that as there was no fountain in the immediate vicinity, and no open water nearer than the park lake, a quarter of a mile distant, the water proved a great attraction. This suggested the idea of something more ornamental than a dish of water, and a hollow mound of stones was built, which was about three feet in diameter at the base. The center was filled with garden soil and firmly imbedded in the top was placed the largest terra-cotta saucer that could be purchased. Around the edge of the saucer was set out sweet alyssum and a delicate variety of sedum, and lower down among the crevices of the stone, slips of English ivy were planted. The saucer was kept clean and filled with fresh water.

We witnessed many early morning baths in this miniature pool. The robins enjoyed it most often, chasing each other and quarreling to have the first dip, sharing it willingly with the sparrows, but always objecting to the intrusion of their own kind. Sometimes as many as five birds would strut up and down the lawn, impatiently waiting their turn. The English starlings with their sweet boy-like whistle, often the white-throated Peabody birds, the vireoes, the gold finches, and an occasional

blue bird, came to drink, if not to bathe, in the little, cool, flower-circled pool. Many other birds were occasional visitors, and later in the season a migrant Louisiana water-thrush stopped for a call; and in November a number of hermit thrushes and juncos remained for several days feeding and roosting in the arbor. One thrush seemed loath to leave us, and delayed his departure until after Thanksgiving.

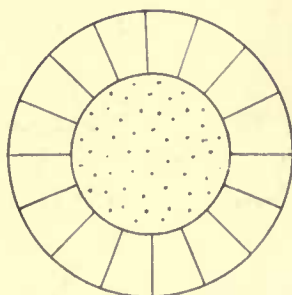
When summer came a great many butterflies haunted the garden, and about the middle of August, as a young lad was coming to visit us, we conceived the idea of making a collection of such butterflies as could be found within the limits of a suburban garden.

The Fisherman's landing net was borrowed, and a butterfly net of mosquito bar was substituted for the fish net. At the drug store ten cents' worth of cyanide of potassium was bought, and placed in the bottom of a glass fruit jar. In order to protect it and

keep it in place, a little cotton was laid with it, and over the whole was glued a piece of strong white paper, perforated with holes. To cut and fit the paper, we placed the jar upon it and drew a pencil mark around it; then with the same center, but a radius about an inch longer, another circle was marked off. At intervals of about an inch, slits were made from the circumference to the inner circle—as in the diagram on page 29. After making the air holes, the edges of the tabs cut were touched with glue and bent inward, making a platform which, when slipped to the bottom of the jar, prevented the deadly poison from coming in contact with anything. Labelled "Poison," and with the rubber-protected cover screwed tight, all was ready for the first specimen. Into this jar the butterflies were dropped, and in a few moments painlessly killed. We usually left them in the jar for several hours or overnight, to make sure there would be no restora-



A large bowl of water, surrounded by alyssum, sedum and ivy growing over a mound of stones, formed an attractive invitation to the birds and butterflies



A plan of the paper cover devised to keep the poison from spreading



The first two specimens (upper row at left) are *Basilarchia astyanax*. Next to them is *Grapta Interrogationis* with the question mark upon his wings

tion after they were pinned. A large pasteboard box was lined with corrugated paper, such as is used for mailing photographs; into this pins could easily be fastened, and our amateur collector's outfit was complete.

The work of collecting, arranging, and classifying really was very exciting. Sometimes most beautiful and brilliant bits of color would be seen floating over the flower beds, stopping here and there to sip a bit of honey from lily or rose, and then slowly and gracefully sailing away over the fence into our neighbor's territory in a most tantalizing and aggravating way, for it was one of our rules that nothing should be captured outside of the garden. Then the boy, armed with his net, would retire to the shade of the arbor, where he would sit awaiting the return of the vagrant.

Our first prize was the beautiful *Papilio troilus*, or the Spicebush Swallow-tail. How exquisite he looked in his black velvet robe with the shaded blue border, fastened at the bottom near the swallow-tails with one deep orange gold button, and decorated around the edges with a double row of brass buttons! It seemed as though the proud fellow knew that the pure white phlox upon which he had alighted was just the background to set off his royal costume. He must have wandered from the park where he spent his early life feeding upon the sassafras trees. After reaching maturity he draws the edges of a leaf together, sews them in a firm, strong seam, and lies hidden there, swinging in his dainty green cradle until he feels the stirring of his wings.

Our second captive was the *Anosia plexippus*, who proudly lords it over others of his kind under the common name of the Monarch. Clothed in reddish orange with heavy black veins and a wide black border, he sails high above the flowers with great strength and dignity. The Monarch has a record peculiarly his own. He is the only butterfly known to migrate as the birds do in the fall. It is said that any chrysalids or caterpillars undeveloped at the time of the frost, die, while the butterflies which we see in the spring have returned from their long flight to the



Papilio asterias, for all his black and gold and swallow-tails, was once the ugly parsley-worm

ing the country hundreds of thousands of dollars annually. The voracious little green caterpillar destroys entire fields of cabbages and other vegetables. He first reached this country about fifty years ago, probably coming to us on some steamship, for he reached Quebec in 1860. Since then he has taken possession of the cabbage

Gulf States. They fly in swarms, and have been seen in such numbers on the east and south coasts of New Jersey, clinging to the dry twigs of leafless trees in October, that the branches have had the appearance of trees in full autumn foliage. These butterflies have been seen as far as five hundred miles out at sea. They belong also to the class of protected insects, which are provided with a secretion which is distasteful to birds and predacious insects. The scent pouch of the Monarch is situated near the center of the lower wing, and is completely hidden by long soft feathers or scales. This odor they are able to emit at will, and in that way drive off insects and birds that might otherwise prey upon them. The caterpillar feeds upon the milkweed.

The garden was full of common little white and yellow butterflies, and we were surprised to find upon examination how great was the variety among them. The innocent-looking little white *Pieris rapae*, or Cabbage Butterfly, has probably been one of our most expensive pleasures, cost-



Anosia plexippus, the bold-flying Monarch, who migrates to warmer lands in the fall



Colias philodice (male and female), the bright-colored and more beautiful form of the clover-worm

fields from the Atlantic to the Pacific. In our garden the caterpillar fed upon the nasturtiums and mignonette, and in that state was not as attractive as when dancing like a spirit over the flower beds.

His brother, the *Colias philodice*, brightened our garden from spring to fall. We are all familiar with this little "Friend of the Wayside," or the "Puddle Butterfly" of our childhood. Though apparently all alike the butterflies reveal, upon close examination, great diversities. They are generally found in pairs, the male with a rather severe black border to his wings and two decided black dots on the upper edges, while my lady has a clouded or shaded black border, wider at the tip of the upper wings, and ornamented with irregular spots and dashes of yellow. Two orange-colored eyes are found in the centre of the lower wings. Some varieties have a narrow rose-colored edge and shade into emerald green on the under side of the wings; but beautiful as they are when flying, the



Vanessa Antiopa or Mourning Cloak has velvety, maroon wings with a cream colored border. He comes with the first warm weather and stays on until winter



Papilio turnus, the Tiger Swallow-tail, paid a visit from the alders in the park nearby



Papilio troilus might be mistaken for *Basilarchia* (top of page 30) but for his swallow-tails

little green caterpillars, whose natural food is the clover, are among the most destructive of the garden pests.

The *Basilarchia astyanax*, or Red-spotted Purple, might easily be mistaken for the *Papilio troilus*, so similar are they in color, unless one observed the absence of the long swallow-tail appendages. The upper color is

of the most stately and dignified of our garden visitors. It is rather slow in its movements, as befits the solemnity of its name, and can easily be picked with the fingers from a bending flower. *Vanessa* makes its appearance with the first warm March winds, a real harbinger of summer days to come, and stays late. A little family of six were found the last week in November, nestling close together upon a scrap of woolen cloth, trying to keep their feet warm.

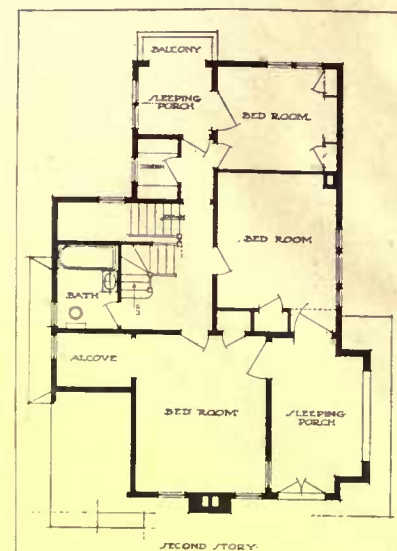
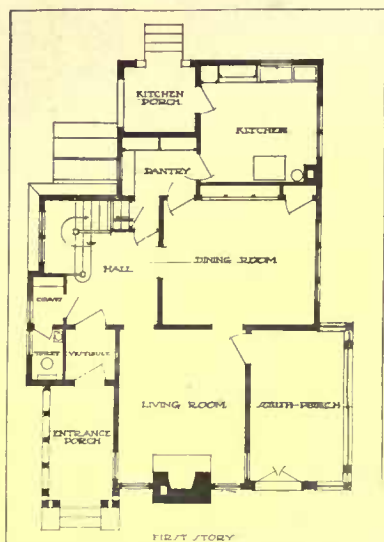
It was a sorry specimen of the *Pyrameis atalanta* or the Red Admiral, that found his way into our garden. He must have seen hard fighting on sea or land, that brave old Admiral, but he still wore gallantly his epaulets of red, and though his under wings were in tatters, and bore the traces of many battles with the winds and waves, he was a gallant fighter, and died hard, leading us a long chase up and down the garden before he was finally captured in the folds of the white net. Perhaps his diet of nettle and hop had tended to make him high-spirited and courageous.

It was a singular coincidence that on the same day when the Admiral came to our net, the Silver-spotted Skipper (*Epargyrus tityrus*) followed in his wake. Possibly the Skipper and the Admiral had embarked on their long voyage together, never

(Continued on page 52)



The Skipper with uplifted wings shows his silver medal with pride. Above him is his battered Admiral



A house and its floor plans, showing provision for a sleeping-porch adjoining two of the bedrooms, in addition to the glazed-in porch on the first floor

Building a House with a Sleeping-porch

A GROUP OF HOMES THAT HAVE BEEN BUILT WITH THIS MODERN AID TO RIGHT LIVING—SOME OF THE STRUCTURAL DETAILS THAT HAVE PROVEN BEST

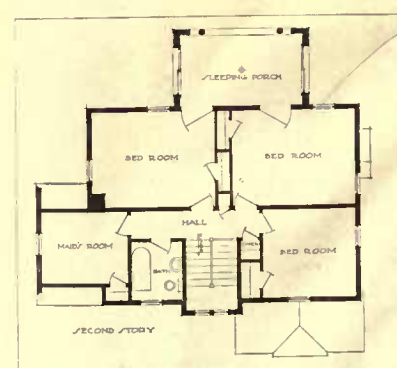
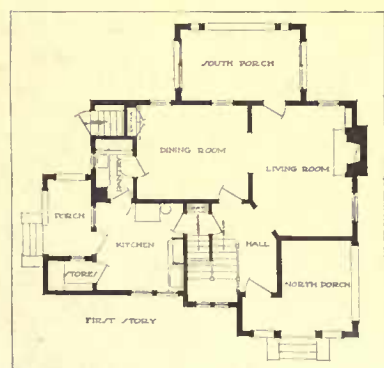
BY MAURICE M. FEUSTMANN

Illustrations from the work of Scopés & Feustmann and E. T. Coleman, architects

THE reasonableness of the sleeping-porch as a feature in country house planning having been firmly established, it may be assumed that a brief description of a group of moderate cost cottages erected in the village of Saranac Lake, and possessing such porches, may prove of interest to prospective home builders in general. While these cottages were designed primarily to house patients suffering from diseases of the chest and throat, the principles involved are applicable to the planning of any home, the surroundings of which will permit the incorporating of one or more sleeping-porches. Nor are the uses of the latter narrowed down to the purposes just mentioned. As an accessory to the sick-room where the convalescent may spend the greater part of the day and even some of the milder nights, the sleeping-porch must surely appeal strongly to the family physician as a valuable adjunct to medical treatment in a variety of cases. To those who know the pleasures of camp life and of sleeping under canvas or in a lean-to, the sleeping-porch will ap-

pear as an easy mode of continuing that health-giving pleasure amidst the home surroundings. To the commuter of long city hours and moderate income, the sleeping-porch offers an investment bringing the large returns in the form of refreshing slumbers and of renewed vigor for the tasks of the next day. When the sleeping-porch assumes more generous proportions, anywhere from ten by sixteen feet and over, then the uses are extended to those of an outdoor sitting-room or children's playroom. Here we have pleasant suggestions of greater privacy and much more freedom from interruption than the usual downstairs piazza can possibly afford.

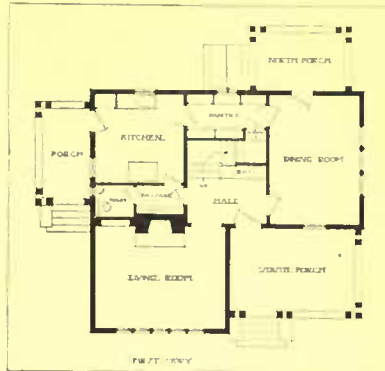
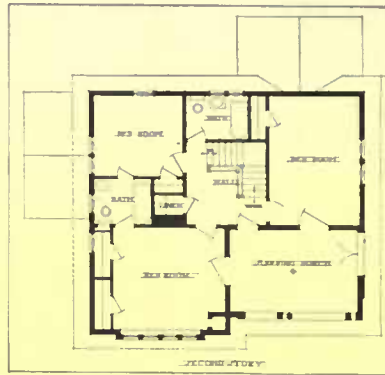
A sleeping-porch, to give the greatest possible service, should possess as many as possible of the following essentials: accessibility from two bedrooms and, if possible, from the hall; freedom from drafts; least possible shading of room from which it is accessible; greatest possible comfort in the way of accessories; pleasing external appearance.



When the sleeping-porch occupies a free-standing wing as here, sliding sashes should be provided at either end, but ordinarily the whole side may be left without them



This house and the one upon the opposite corner show an interesting variation in exterior treatment, although both are built from the one set of floor plans adjoining



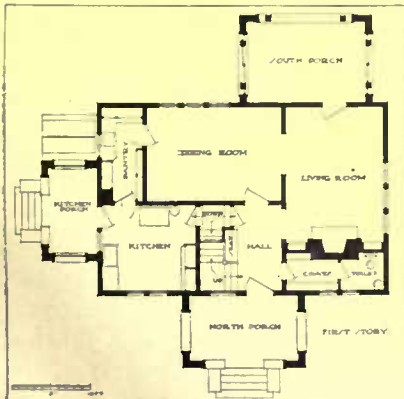
The plans show an extremely simple and economical arrangement of a small house. A north porch for outdoor dining is provided in addition to the sleeping-porch on the south



It is no easy matter to design a sleeping-porch as an integral part of the mass, yet that is one of the most important considerations aside from the practical ones

Where the main entrance from the house is from the south and only one porch can be indulged in, it would seem the most economical plan is to arrange the porch in both first and second stories in the internal angle of the building, as shown in most of the illustrations herewith; but a slight disadvantage must be noted in this scheme in the somewhat restricted view offered the occupant. This drawback is overcome in a house shown below, where the porches are carried in front of the main line of the house. Not only is the view extended in one more direction, but

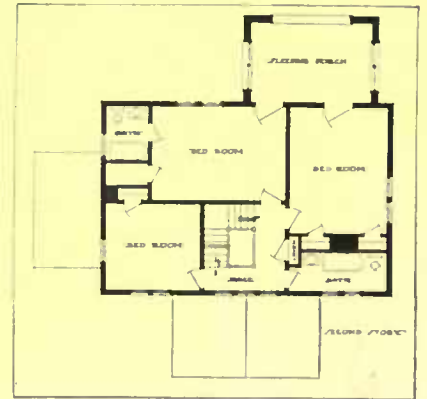
the amount of light finding its way into the porch is considerably increased. This cottage also has a north sleeping porch—so that the person occupying the southeast bedroom may use either porch at pleasure, according to the season of the year or prevailing weather conditions. When the main entrance from the house is from the north, as in the house at the bottom of page 32 and in the middle of page 33, the best arrangement of the porch is in the form of a wing with a sleeping-porch above the general piazza on the first floor. The more the house takes the form of



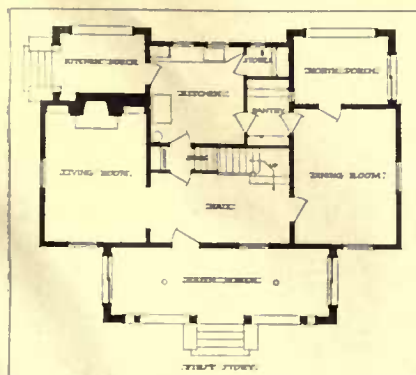
The first story of the house to the right is a good example of turning one's back to the north



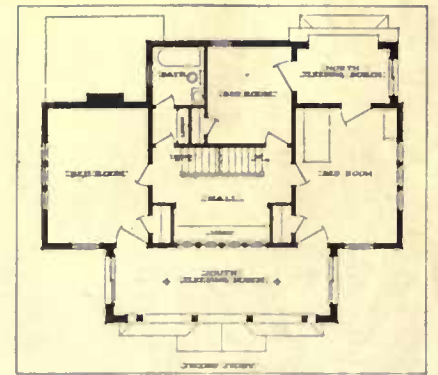
One can readily see that the two south porches, one above the other, contribute to the unity of the design by their treatment as a separate gable



Doors to the sleeping-porch from the two bedrooms are three feet eight inches wide



Another type of the sleeping-porch home, where the house faces south and has its main first-story porch along the front. The second floor plan indicates also a north sleeping-porch in the eastern angle



the English house of the Elizabethan or Stuart periods, that is, the longer it becomes, the easier it is to harmonize this porch extension with the balance of the structure. The entrance porch, found so largely in Kent—open porch below with an alcove filled with mullion windows above—offers many suggestions whenever it is possible to include both porches in one wing subordinated to the main structure.

The comfort of the occupant being the first requisite of a sleeping-porch, the question of protection from the elements must receive early consideration. Where the sleeping-porch is situated in internal angles, it is sufficient to provide against draughts by simply placing sliding or folding sash in one end of the porch. If the porches form part of a projecting wing, then this matter is disposed of by placing sash in both ends. The writer does not regard it as necessary to provide further protection in the way of sash on the front of the sleeping-



Where the exterior walls are of stucco, the inside of the sleeping-porch is usually finished in the same material, though it is cheaper to sheathe it with wood

porch. If it is to be used as such alone, it should be left quite open, for, if the plate (the horizontal timber supporting the rafters above) be of moderate height, six feet eight inches or seven feet, it is only on rare occasions that snow or rain will beat in, and, in such cases, a folding screen or canvas will be sufficient to protect the bed. Should the use of the sleeping-porch be extended to those of an outdoor living-room or playroom, then there seems to be greater need of enclosing all sides with movable sash. But this is largely a question of individual notions as to comfort. The best results are obtained at the least expense, by the use of hori-

zontal sliding sash; these should be provided at the top with dowels running in grooves, to reduce the friction, and with brass sheaves and track at the bottom. The meeting stiles should be weather-lipped.

(Continued on page 60)

Achieving Character in Remodeling

WHAT MAY BE DONE WITH THE AID OF NEW WOODWORK AND BUILT-IN FURNITURE, GOOD HANGINGS AND WALL COVERINGS, IN PLACE OF COSTLY STRUCTURAL CHANGES

BY KATHARINE LORD

SOME years ago, the rush from the country to the cities left many empty farmhouses, and comfortable homes in towns and villages. Now the reactionary wave, which is taking place especially among the professional classes, who are on all sides going back to country life, is again filling these same houses and restoring them to their former condition.

Writers, painters, sculptors, all kinds of workers who can do their work where they will, are extending the term of their country residence until it covers all but a few months of the year. Many who have been fortunate enough to inherit or acquire places near enough to the city for commuting or weekly visits, make the country their permanent residence.

In every town

and village we see the neglected houses of the last generation rejuvenated and adapted to modern needs. Some of these dwellings have long stood empty, more have descended in the social scale, and have been loaned or let for a nominal sum and allowed to go unrepaired and unpainted.

Visit any country district now and you will see these long neglected places taking on new life with a fresh coat of paint, thrusting forth a veranda here, breaking out a door or window there, or adding a chimney elsewhere, all giving token of enlarged life and comfort within.

In the city, too, old houses which had perhaps sunk into slovenliness are constantly being converted into apartments and the simpler



The removal of a loaded plate-rail and substitution of a soft-toned paper and frieze of Dutch blue worked wonders in this room

office buildings, now superseded by skyscrapers, changed into smart studios. And thus to the furnisher as well as to the architect the problem of reconstruction is being constantly presented. And for the decorator it is a most difficult one, for he or she is usually expected to accomplish the task without much structural change.

Let us agree to call the reconstructing decorator she, since it is most often a woman who struggles successfully with the difficult, yet stimulating, task of achieving beauty from unlikely materials. And there is no occupation more interesting than the rehabilitation of an old house that has fallen from its original state of magnificence or comfort. There is the thrill of adventure in seizing upon something out of the past and fitting it to modern needs. When expense need not be too carefully considered and structural changes can be freely made, it is a simple matter and one usually put in the hands of an architect. But often this is not feasible, and the house designer is called in to see what he or she can accomplish by redecorating and furnishing alone.

The house is likely to belong to one of two types, each having the narrow hall and straight flight of stairs, commencing discouragingly near the front door. The more spacious of these houses will have rooms on either side and a narrow back hall at right angles to the front hall and opening on to a side porch, perhaps with service stairs leading from this second hall. The house may have the narrow hall on one side and a transverse wing with its main room, which will be the dining or sitting room, opening directly on to the porch.



The low frieze was secured by tacking narrow white molding over the papered wall. The location of the posters over important pieces of furniture requires considerable study



An old house that was redeemed largely by the new staircase and the changing of dark, gloomy woodwork to the white by refinishing. It seems hard to paint walnut, but that is sometimes the only way out of the difficulty

The first thought in remodeling such a house is simplification. Every self-respecting house of forty or fifty years ago had its parlor and sitting-room, the former an apartment of state, however small, and in many cases used only on occasions of ceremony. It became often a chamber of horrors, in which no one cared to sit, a place suggestive of wax wreaths and funerals. The family used the sitting-room, or in smaller houses, the kitchen, as its living-room and the parlor was left in de-

served abandonment.

If the house were large, the parlor was not closed, but was still used sparingly, while the library on the other side of the hall became the living-room, and mother's bedroom or the dining-room became the romping ground of the children, the nursery being almost an unknown quantity in the early American house. When such a house is given to the architect, he at once begins to knock down walls. Several small rooms are thrown into one, stairs are moved back, generous verandas are added, and a spacious, convenient dwelling is achieved.

It is often given, however, to the house decorator or the housewife herself to make habitable and beautiful, if possible, such a house without the expense involved in structural changes. Can it be done, you may ask?

That it can be, is proved by many pleasant homes and by the work here pictured of at least one woman decorator, Miss Edith Van Boskerck, who has had unusual success in remodeling and simplifying the over-ornamented houses of one or two decades ago.

And the means by which she does this are few and

easily used, once they are thought out.

First the house is divested, in imagination at least, of everything it contains. Each room is reduced to four bare walls, a floor and a ceiling; and their proportion, lighting and material are carefully considered. Then comes the study of the use of the room, the things old or new that it must contain, of the personality and occupations of its probable occupants.

With all these elements simmering in her mind, the decorator gradually evolves mental pictures of a room in which color and line produce a harmonious setting for certain articles conveniently placed for use, and for certain human beings using these things in the daily occupations of an actual life.

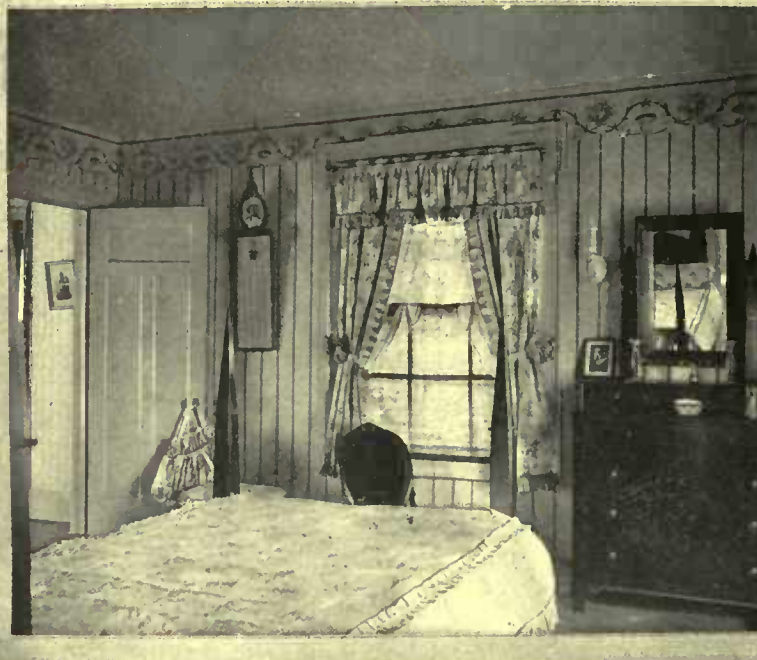
This method does not produce period rooms, though the designer must be conversant with the periods and able to use this knowledge to the best advantage, but it gives rooms of quiet beauty and distinction that actually invite one to live.

If it is not possible or desirable to take down walls to throw together two small rooms, try the effect of removing the door and filling in the adjacent corners on either side of the door with built-in seats which are to appear as one partitioned into two sections. This door will usually be formed about three or four feet from the end wall, near its windows—just the place for a comfortable seat. This is much simpler of course than taking down the partition, since it involves only cutting through some laths and plaster, disturbing no beams.

It is almost a truism to say that the two rooms should have wall covering and hangings alike and their furnishings of the same character in order to deceive the observer into thinking them one. Perhaps seats may not be desirable, and in any case will not be needed on both sides of the door. The other may be occupied by bookcases in the same



Character and cheeriness were given this old dining-room by the new white wainscot and the stenciled frieze that has been so well handled



This low-ceilinged bedroom was made to seem higher by the pronounced verticality of wall paper and door panels



New wainscoting in harmony with the old trim, and the plain frieze to offset the cornice were the chief features in the redecoration of this old dining-room

way. The cases should be built right up to the door casing, and a molding line of some kind carried around the casing to secure the effect of continuity.

We are just beginning to realize the value of built-in furniture, not only as a convenience but for securing special lines. The house-keeper knows well to what degree it helps in keeping a room tidy, and one has only to try it once to appreciate its value in space saving. Its possibilities in correcting bad proportions are as great. For example, a plan used in a studio whose width was inadequate to its length, was the building in of a square cupboard with capacious shelves for candles and all the painter's tools—it would do for a clothes closet in a bedroom—reaching two-thirds of the way to the ceiling, and filling in the remaining space with a seat. This entire arrangement was built quite separate—attached and could be easily moved and re-adjusted to another room.

The dining-room on pages 34 and 35 was the result almost entirely of a process of simplification. In a house built some twenty years ago, it had a plate-rail loaded with different objects, dish cupboards and sets of shelves without number and the typical bay-window with window-seat—a useless arrangement, usually, for no one sits in a dining-room except at meals. The plate-rail was removed and replaced by a simple scheme of moldings, with an occasional Dutch poster set in to give color and life to the walls.

The custom of having only a few pictures and those fine ones is rapidly growing. A heterogeneous collection of pictures, differently framed is always difficult to arrange. To have all the frames alike on paintings, photographs or prints of whatever subject is still worse and suggests that you have bought up the over

(Continued on page 64)



In addition to the cretonne-covered furniture of willow or wicker that has come to be well and favorably known for summer use, there are now many new forms of cretonne-covered storage cases, screens, shoe-boxes and other ingenious and attractive pieces obtainable

Summer Furnishing With Cretonne

BY SARAH LEYBURN COE

CRETONNE has always been more or less in evidence for summer furnishings, and even when not particularly fashionable it can be had in a number of different designs, for it is a material that is quite too effective to be slighted, although it may be put into the background temporarily.

For the last two or three years, however, there has been an increasing revival of its popularity, and it is used not only for draperies and hangings, but for covering furniture, or rather for making furniture in a style especially suitable for summer bedrooms. Chairs and sofas upholstered in cretonne and screens covered with it are as familiar as the time-honored curtains and draperies, but the new use of this material is a radically different one.

The cretonne-covered cabinet or set of boxes is designed with special reference to the size and shape of various articles of one's wardrobe, and is so arranged that no space is wasted and each

section or box can be filled to the best advantage. The idea for the construction of these cabinets

doubtless grew out of the cretonne-covered shirt-waist box that proved its usefulness long ago. It was found that instead of one deep box, several shallow ones would prove more serviceable for holding clothes, especially light garments that crush readily, and, rather than an unwieldy pile of boxes, a light wooden frame with a separate support for each box would be much more convenient.

From this general plan a number of cabinets of different size and shape have been evolved, until there is now cretonne box furniture to meet all the requirements of an ordinary wardrobe. The frames which are substantial but quite light are of white enameled wood, and the boxes are of extra heavy pasteboard covered with cretonne to match the draperies of the room. The boxes fit into the frames just as the drawers fit into a bureau and they are pulled out by means of tabs made of the cretonne and fastened to the bottom of the boxes, one at either side. A few

of the smaller and more elaborate cabinets covered with
(Continued on page 72)



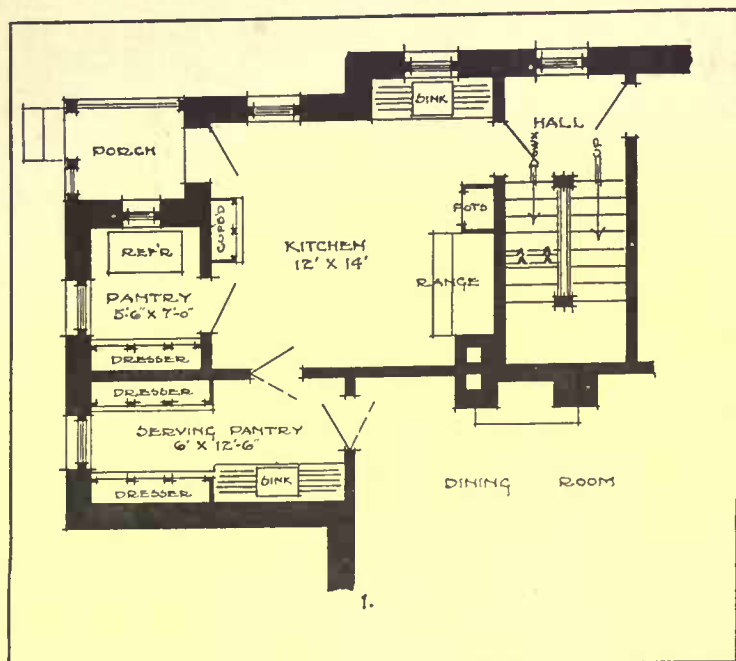
An octagonal shoe-box with upholstered lid is a new departure



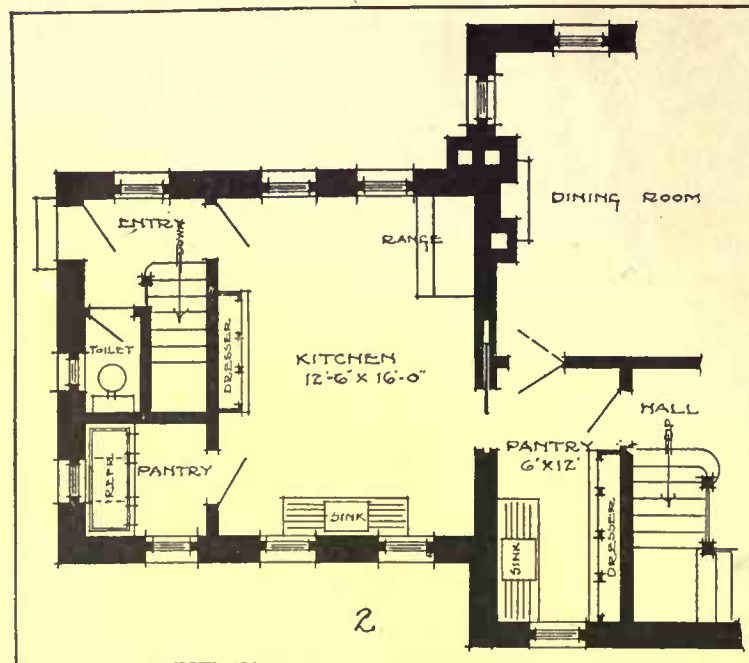
These seats with cretonne-covered boxes on shelves below come in several sizes



A work-table of enameled wood with a cretonne bag set in the open top



1. A compact and orderly arrangement securing two doors between the kitchen and living quarters at both points of contact



2. The refrigerator is built-in, filled from outside. A sliding door to pantry is a space saver; cross draught, with four windows

The Essentials of the Modern Kitchen

BY JAMES EARLE MILLER

Illustrations by the Author

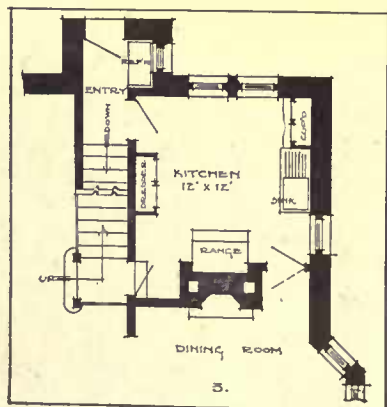
"A Fat Kitchen Makes a Lean Will."

THERE is a growing and altogether proper tendency to treat the kitchen as an integral part of the house, which was almost entirely absent in English and American houses of early times; in fact, until within the last twenty-five years very little thought was attached to it. A century ago it was regarded advisable to have the kitchen occupy a separate building somewhat removed from the main building or located at a great distance from the dining or living-rooms, oftentimes the whole length of the house. The principal reason for this was the primitive methods used in cooking and preparing foods which were very objectionable at close range. Odors, noises and unsanitary appliances made the kitchen a place to be abhorred and to be kept as far away as possible. The present-day intelligent methods of dealing with the kitchen, particularly in America, have effected a complete transformation in this old idea. Our modern successful architect of the home attaches great importance to the planning

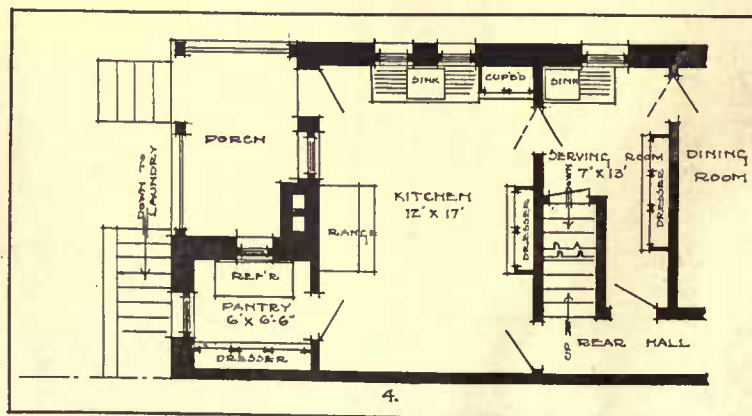
of the kitchen, with its adjoining pantries, closets, storage rooms, etc.; and rightfully he should, as it goes more towards making for the convenience, help and comfort of the up-to-date household than possibly any other feature of the home.

The modern English kitchen with its relation to the dining-room is interesting for comparison with those here in America, chiefly because the early English settlers constitute

the original source from which we obtain our start in house-building. The English kitchen's adjuncts practically comprise separate departments, such as the scullery, larder, wood, ashes, knives and boots, fuel, etc. This condition naturally requires the employment of considerable help even in the smaller homes. On the other hand, the compactness so noticeable in American homes—requiring perhaps one-half the space, thus reducing the necessary help to a minimum and obtaining the maximum of convenience—has brought our kitchen to a standard, nearly, if not entirely, approaching the ideal. The American architect has based his idea for this compactness upon the same reasoning as is exercised in fitting up a convenient workshop, for truly a kitchen is the workshop of the house. Again, the peculiar custom of medieval times in placing the kitchen a considerable distance from the dining-room still survives in the English homes, while in American homes a marked difference has long prevailed. The kitchen here is usually placed as near as possible to



3. For a small house, without pantry, only one stairway is needed



4. The kitchen end of a double house, where light and air can come from but two sides. The rear hall is lighted by a glazed door

the dining-room, only separated, if at all, by a china-closet, pantry, or butler's room.

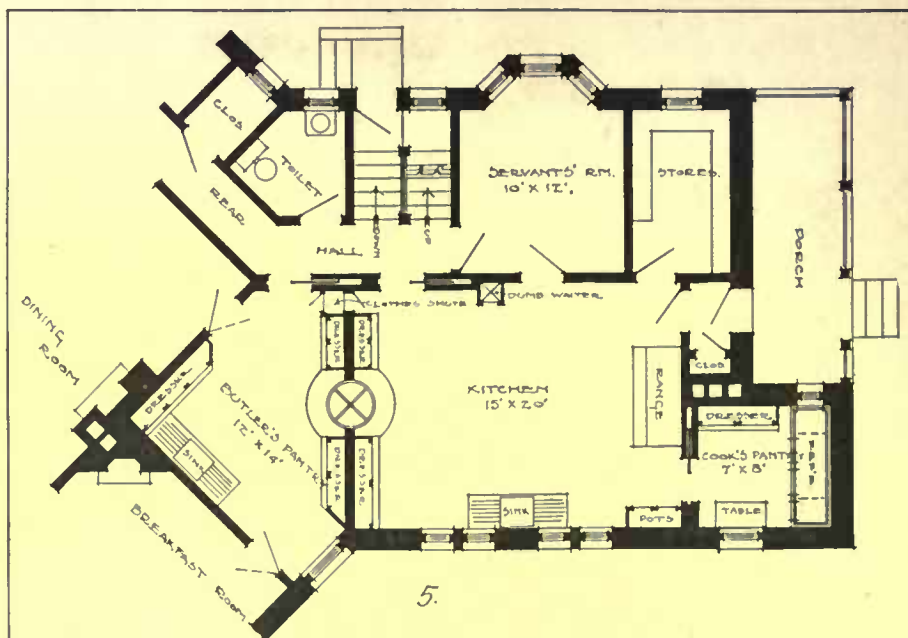
Convenience, cleanliness and ventilation are three essentials that must be paramount in arranging the up-to-date kitchen and its accessories.

While there may be differences as to minor details, the principal features to be obtained in establishing a modern kitchen may be found in the various suggestions herein contained:

1st. The Kitchen should be roomy but not excessively large. This applies to any size of house, as too large a kitchen is maintained at the expense of convenience and labor. An ideal size for a kitchen in a house measuring 25 x 50 (containing living-room, reception room, dining-room and pantry on first floor) would be 12 x 15 feet.

2nd. The general construction of the interior is of the utmost importance. The floor may be of hard Georgia pine, oiled, or covered with linoleum or oilcloth. As a covering, linoleum of a good in-laid pattern, while more expensive than oilcloth, proves the best and most economical in length of service. In a house where comfort is demanded regardless of cost, an interlocking rubber tiling is suggested. This flooring absolutely avoids noises and slipping and is comfortable to the feet, as well as being of an exceptional durability. Other floors of a well-merited character are unglazed tile, brick, or one of the many patented compositions consisting chiefly of cement, which is also fireproof.

The wainscoting, if adopted for the kitchen, can be of tile, enameled brick, or matched and V-jointed boards, varnished or painted; but in any event should be connected with the floor in a manner to avoid cracks for collecting dust or dirt. This is accomplished (when a wooden wainscot is used) by means of a plain rounded molding which is set in the rightangle formed by the junction of the floor with the wainscot. While seldom seen, because of the expense, a kitchen completely tiled or bricked on walls, floor and ceiling is indeed a thing of beauty and necessarily an ideally sanitary room.



Service wing of a large country house, with every desirable convenience—sliding doors, built-in refrigerator, clothes chute, dumbwaiter, and a revolving drum between kitchen and butler's pantry

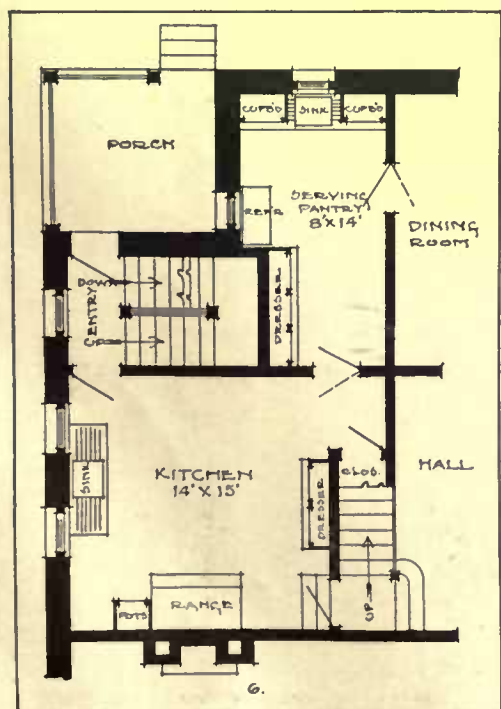
washed and kept free from dust and dirt, which latter is a disagreeable feature in the use of wall papers.

3rd. The proper installation of the various furnishings of the kitchen is worthy of much thought and consideration. Of all these, nothing is of more vital importance nor appeals more strongly to the household than the range. The size of the range is largely governed by the size of the house or the number of persons it is intended to serve. However, it is advisable to have a range not less than three feet square for a seven or eight-room house. It should be of a thoroughly modern style, with a hood over it, either built in or of sheet iron, an excellent provision for drawing away the steam and fumes of cooking. And, by all means, the range should be placed so that direct daylight falls upon it. Most present-day houses also have either gas or electric ranges installed in them and these should be near the coal range so as to confine all cooking to one part of the kitchen;

and further, especially in winter when large gatherings are entertained, they furnish a combined service. Some large establishments, in addition to the range, are especially equipped with "warmers."

The sink, being so closely allied in its usefulness to the range, should be placed near the latter and under, between or near windows, but never where the person using it would have his back to the light. It may be of

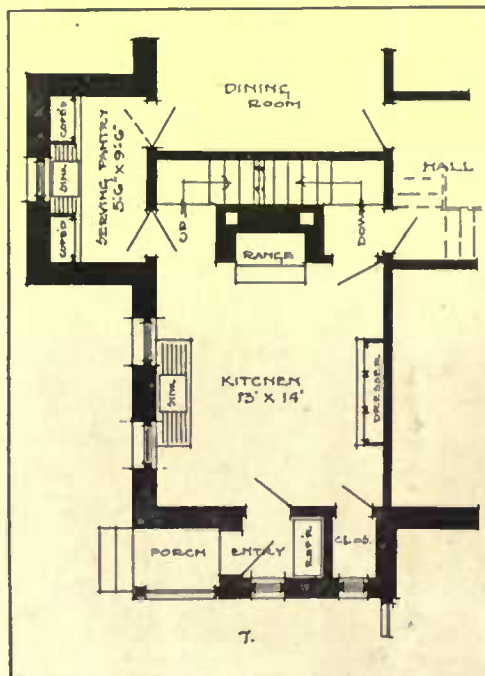
(Continued on page 74)



There is a large serving-pantry here, with the refrigerator set in it—a very convenient place

The doors, window frames, dressers and other necessary woodwork should be plain, made of medium wood and painted some light color or enameled white; or finished in the natural state with a transparent varnish.

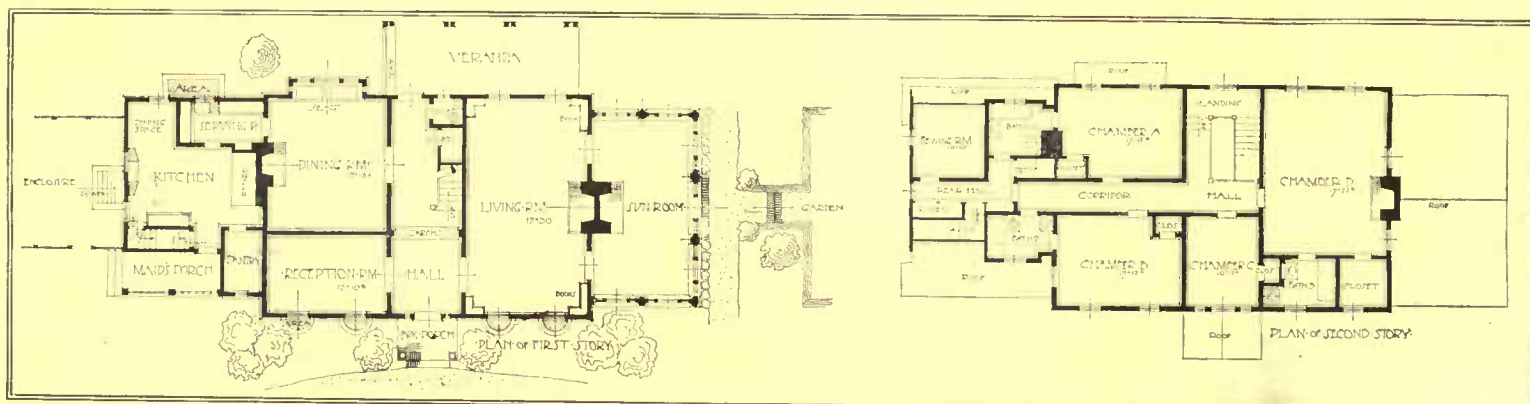
The walls and ceiling, if not tiled or bricked, should be finished with a hard smooth plaster and painted three or four coats of some light color—light yellow, green, or blue making a very agreeable color to the eye. This manner of treatment permits the walls to be



An unusual plan, with the service stairs built around the chimney



Mr. Bloodgood's house is so situated that no side of it is hidden. The service yard is at the far end, screened by a lattice



The house has the typical central hall, extending through the house. Upstairs, all bedrooms but one immediately adjoin baths



Like its New England prototypes, the service end of the house is worked out as a low wing

The entrance is on the north side, the particularly graceful porch being flanked with large rhododendrons

THE HOME OF MR. W. D. BLOODGOOD, HEWLETT, L. I.—*J. Acker Hays, architect*



The owner's bedroom—a room 17x23 feet in size, with white wood-work relieved by cool chintzes



The wall paper in the living-room is a dull yellow in a tiny lozenge pattern, much brighter than in the picture



The hall from the veranda end, showing the faithful detail of steps and balusters



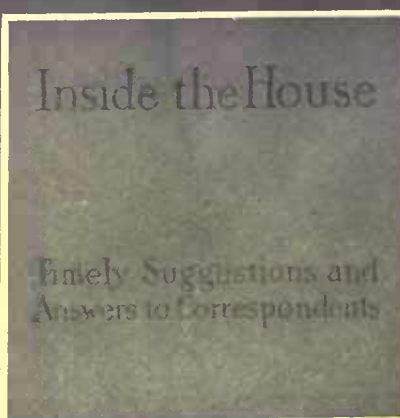
In the dining-room a dull gray foliage paper makes a splendid background for the old mahogany



The hall from the front door. The arch is particularly graceful in its lines and delicate detail



The sun room opens from the living room and has its own fireplace, flanking which are two ivy vines growing in boxes



The Editor will gladly answer queries pertaining to individual problems of interior decoration and furnishing. When an immediate reply is desired, please enclose a self-addressed stamped envelope.

Curtains Made of Japanese Toweling

VERY attractive curtains for a bungalow or country house may be made out of Japanese toweling.

Japanese toweling, unlike that we use, is made of cotton, and is only twelve inches wide, of more artistic value than economic use. However, it is with the artistic value we are dealing, and the Japanese have not failed to make these homely articles of everyday use, things of beauty.

Almost all of the Japanese toweling comes in blue, with the design left white, or a white background with a design in blue of one or more shades. Morning-glories, leaves of trailing design, chrysanthemums, pine trees, bamboo, waves, and birds and flowers of many varieties, are the designs usually employed on these narrow strips of goods.

Where a full curtain is required, from two to four widths can be joined, either by "whipping" the widths together, or by joining them with a little braid of unobtrusive design.

The towels seem to have been printed in double lengths of about a yard each, the top of each design coming together where the double length is unfolded. For this reason where a bird is the motive used in the design, each towel length will have to be cut and reversed, joining them together with a neat seam or with braid, otherwise every other heron or crow, as the case may be, would be standing on his head.

Where the design is a trailing one of flowers or vines, this difficulty does not arise, for the up-and-down of the design will not make any difference.

If merely a valance and over curtains of the toweling are to be used, one width of the goods at either side of the window will suffice. If the design permits of it, one running width may be used for the valance. As a rule, however, each repeat of the design will have to be cut and the lengths joined, a hem being made at the top and bottom of the valance.

These very effective curtains are particularly appropriate for a dining-room or bedroom. As the color is almost invari-

bly blue, they have to be used where the color scheme of the room is blue.

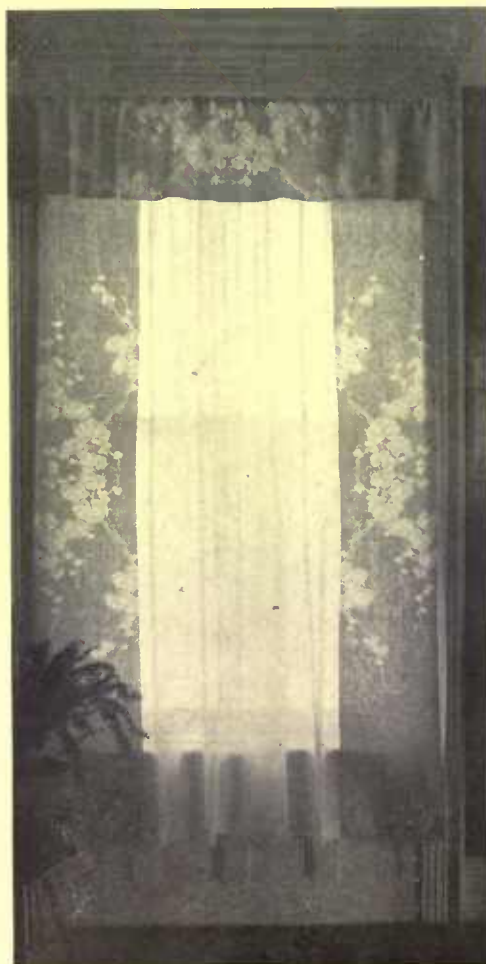
I have one very charming pair of yellow curtains made from Japanese toweling, but it is most unusual to find any but the blue goods. The design of these yellow curtains was made in a most unusual way, and it is worth describing, as it show the great ingenuity of the Japanese.

At regular intervals on the twelve-inch cotton strip a little stone was tied, bound tightly around with cord. The whole length of cloth was then put to soak in a brook in which there was a deposit of

iron. The material was left for some time, and when taken out and dried was a beautiful yellow tone. The cords were then untied and the stones taken out. The very tight wrapping of the cord prevented the water from permeating under the string and an irregular wheel-shaped design of white on the yellow background was the result. Between these wheel-like designs were then pressed fresh maple leaves and pine needles, which were left until they had stained their shape in brown on the yellow background. An ingenious method of designing, I am sure you will say! The little Japanese from whom I bought this toweling told me it was made in a northern province of Japan.

Where curtains of Japanese toweling are used, the same material may be used for the other draperies and furnishings of the room. Bedroom, bureau and dressing-table covers may be made, or a pin-cushion and pillows for the couch, and if it does not introduce too much of the same kind of design a bedspread and shams may be made of the same toweling by joining several widths together in an effective design. Be sure before starting your furnishing with this toweling to know just how much you will need, and have it in the house. Otherwise you will run short and will be unable to procure more toweling of the same design. It comes in pieces of various lengths, and costs from fifteen to twenty-five cents a yard.

Where Japanese toweling is used for the hangings and furnishings of a bedroom, I would suggest the furniture be white or stained cottage furniture of simple design. Some willow furniture may be introduced. A Japanese matting, preferably a plain color, will be pretty on the floor. An imitation of grass-cloth paper of tan, blue or gray, depending upon the color of the furniture and matting, will be appropriate as a background for the simple water colors or inexpensive prints that should be used in this simply furnished bedroom. Select a plain paper, as the design in the toweling will be ample ornamentation, and other design introduced in the paper or floor covering will give an overcrowded and confusing effect to the room.



Three strips of Japanese toweling are sufficient for curtains and valance. The flower designs can be used without cutting

To Prolong the Life of Leather

LEATHER furnishings from which the "life" has departed—in other words from which the gloss and firm texture has disappeared—will require special care to prolong their usefulness. The broad comfortable leather couches, that have become more attractive as they have aged, to the householder who considers comfort only, may become very objectionable to the particular housewife who deprecates their growing dilapidation.

A little understanding in the way of care may give them a new lease of life without interfering with their comfort-dispensing qualities. The couches and the big roomy leather chairs that are in constant use, need not be allowed to grow shabby. Their trimmings may have a persistent way of separating themselves from wood, but the practical housewife will find that they may be securely fastened by means of a paste made of melted India rubber mixed with shellac varnish.

The leather can be kept from drying out and cracking, can be made to look almost like new, and can have its durability greatly increased, by being washed occasionally with warm milk. A soft cloth wrung from a little warm milk—only a small portion will be required—should be rubbed thoroughly over every part of the couch or chair, covered with leather; and also over its trimmings. Then rub briskly with a dry cloth. This treatment will keep all leather furnishings pliable and durable.

Practical Bedroom Suggestions

FABRICS for summer bedroom furnishings and trimmings need not necessarily be cretonne or the popular flowered cambrics. Some of the newer ideas display attractive and inexpensive jute tapestries and durable fabrics of striped cotton. These are not only used for window hangings and for bedspreads, and furniture coverings, as the cretonnes



One of the pretty flower designs in which the Japanese excel. The color is blue in varying shades



The animal patterns must be cut in the centre and reversed, with the design upright.



A sea-bird motif in black and blue. A beautiful effect is obtained by the use of gilt on the wave crests

are used, but they are also mounted as screens, and for covering foot-stools and shirt-waist boxes.

A foot-stool in the bedroom is a convenience seldom found even in the well-equipped summer cottage. It is not only convenient as a foot rest, when taking one's ease on the Sleepy Hollow bedroom chair, but it soon becomes a necessity when tested for every day use, in putting on and taking off one's shoes. Then it is also decidedly convenient for moving about the room, and standing upon it for reaching high places in the daily dusting, for adjusting window shades and hangings, etc., etc. The best form is the little bench-shaped footstool about twelve inches high and twenty-four long. With the top board brought out flush with the end supports, and a narrow wooden strip of two-inch width, extending along the edge on both sides. The stool may be daintily and durably ornamented with the jute tapestry stretched over the top, and drawn down to cover the wooden strips, with a very narrow moulding to finish it at the edge.

A home-made shirt-waist box—prettier than the average canvass or wicker-covered ones bought at the novelty stores—may be made of a narrow dry-goods box of convenient dimensions. Have the lid

securely hinged, and after placing castors at the four corners, cover the wood-work with the jute tapestry to match the foot-stool covering every portion of the wood on top, ends, and sides, and finishing with the little strip of moulding on all the edges. The

first essential in furnishing the little cottage bedrooms is to choose the furniture in proportion to the size and style of the room; to have only the necessary pieces for practical convenience, and to have the entire furnishing pretty and harmonious.

A Banister Polish

ADULL grimy-looking banister railing, and nicks and scars along the lower sections of the banisters, will quickly give the appearance of neglect in caring for the woodwork of the home. A careless maid will soon get the banisters in an unsightly condition in the weekly sweeping and dusting of the stair, unless the practical housewife instructs her as to easy methods of keeping them attractive. After each sweeping it takes no longer than the usual dusting to wipe off the railing with a soft cloth wrung from hot suds; and at least once a month, both railing and banisters should be wiped with a flannel dipped in a polisher made of two parts linseed oil and one part turpentine.



Three attractive designs in toweling. The right hand pattern is in shade of brown, and is appropriate for a child's room



Garden Suggestions and Queries



Conducted by
F. F. ROCKWELL

The Editor will be glad to answer subscribers' queries pertaining to individual problems connected with the garden and grounds. When a direct personal reply is desired please enclose a self-addressed stamped envelope

July

JULY, as far as the garden is concerned, is supposed to be one of the least important months. In many ways it is a crucial one, not that you can do much planting or sowing, but it is the turning point; either you grow lax in the uninteresting fight against heat and drought and dust and insects, and the grounds and flower-beds and garden patch begin to get weedy and dry up, or else you strive your hardest, with both hose and hoes, to keep moisture enough in the soil to keep things growing; you fight off the insects repeatedly until they finally give up in despair; and you see to it that weeds are pulled or cut out while they are still small and die quickly in the hot sun.

July is the season's turning point. If you follow the first course mentioned above, the chances are ninety-nine to one that it is the beginning of the end of your garden's beauty and usefulness for the present year. By the middle of August things will be abandoned when there should be at least six weeks more good pleasure and profit in store for you. Keep the garden fight up through July, and have as slightly and useful flower-beds and vegetable rows in September as you had in June.

Hardy Ornamental Grasses

FOR our northern climate, the free use of the hardy grasses is the nearest approach we can have to the tropical beauty the palms give the warmer places. They can be used with good effect in so many ways that they should appeal to those interested in making the home grounds beautiful and attractive. There is such a variety of them that they adapt themselves to any situation, either the small home grounds or the more pretentious show gardens.

We use them in a mixed border 100 feet long and varying in width from 7 to 10 feet; at irregular intervals we have eight or ten clumps of *Eualia Gracillima* (sometimes called Japan Rush) and *Japonica Zebrina*. I think I like the former best; it has narrow, bright green foliage, with a silver mid-rib and an exceedingly grace-

ful, drooping habit. It grows about five feet in height. *Zebrina* is six feet and is more striking and showy; the leaves are long and broader than *Gracillima*, and are banded across with half-inch bands of yellow. The coloring of *Zebrina* makes a pleasing contrast when combined with the prevailing green of other shrubs.

In the background of the border we use the various *Spireas*, *Lilacs*, *Altheas*, *Golden-Leaved Elder*, *Japonica*, *Syringas* and the Hardy *Hibiscus*. Grouped in front of the shrubs and grasses are *Phlox*, *Delphiniums*, *Columbine* and *Peonies*. Each of these, in its season of bloom, furnishes the bit of color that is never lacking, from the appearance of the *Snow Drop* and *Crocus* till killing frosts in the fall. The colors relieve and bring out the delicate green of the grasses which in turn add the one touch of near tropical effect.

The grasses are perfectly hardy and, as they are late in starting, we use, close around the roots, masses of white and yellow *Tulips*, both early and late sorts, that



The long leaves of the ribbon grass make a good substitute for the less hardy palms

the blooming period may be lengthened. Near the edge of the border, all kinds of *Narcissus* have a permanent home, white, yellow and creamy tints, with *Snow Drops* and white and yellow *Crocus*, to usher in the season.

As the grasses begin to make a good growth, the bulb season ends and is followed by the white, pink and crimson of the *Peonies* which, in turn, are followed by

the pale blue *Delphinium* and the double white *Columbine*, with the *Phlox* season following closely in their wake. As the season goes on, the delicate green of the grasses fills all the bare places that in early spring were white and yellow with *Tulips* and *Narcissus*.

After the first of June, we edge the border with *Cobaea*, *Salleroy*, *Centaurea* or *Alteranthus*, alternating so that it is different each year. This edging is all the annual planting that is done in the border, except an occasional *Salvia Spaldens* for late color, the rest remaining from year to year.

From the time the grasses are well up, they grow better and better till very late in the fall the plumes appear, and in some years remain in fairly good condition all winter. We leave the tops on the grasses until time to uncover the beds and borders in the spring, as the old tops protect the roots and make a break in the monotony of bare shrubs that otherwise fill the borders in winter.

There are a number of annual grasses (*Pennisetum*) that are very ornamental for edging *Canna* beds or shrubbery groups; they do not grow so tall as the hardy sorts and feather out earlier; they are quite effective in ornamental bedding with scarlet geraniums; their light and delicate green foliage very pleasingly veils the strong color and makes a good combination. Some of the many good varieties should find a place in every garden; the taller ones, 12 to 20 feet in height, make ideal central figures for large groups in spacious grounds.

The varieties should be carefully selected for the positions they are to occupy; our place is small, and six feet is as high as we can well use in our border. If the hardy grasses are once tried, I feel sure they will find a permanent home and be better liked as the years go on and they become fully established.

G. RES.

A Two Year Garden

PERHAPS it may help those who despair of making a satisfactory garden to know that I have succeeded in a small space and with few natural advantages. I am not strong and the desire to

get the advantage of outdoor life, coupled with the inspiration of some beautiful pictures in *HOUSE & GARDEN*, determined me to see what I could do. The lot we own is 75 x 150 ft., facing east, with the house set well toward the front, thus leaving a modest back yard of 55 x 40 ft. This was my field for experiment and now, after two years, it contains about a hundred and twenty-five varieties of hardy shrubs and plants all in healthy and vigorous growth. Besides, it has been a source of constant pleasure, and a means of regaining my health. I never allow a man to do any work in it except the heavy spading and fertilizing in the fall. The rest I have done myself.

For the contents of this little garden I mention first the stately hollyhocks. I have them around the edges, south, west and north. When a few scattered ones come up over the beds I leave one here and there, for it seems to me that a stray one is always pretty and artistic, even though out of line. One portion of the garden I call "my park." It is full of hardy shrubs such as lilacs, hydrangeas, elders, sumac, altheas, snowball, japonica, hibiscus and spirea. In the beds there are many of the well known hardy plants, but I always sow some annuals or find some have come up from the previous season where they have sowed themselves. Thus blossoms are there all the season—from the time the bulbs are in flower until the last chrysanthemum is captured by the frost.

Hardy phlox is my favorite with its showy blossoms and it occupies an important position for the garden stars. The beds I edge with sweet alyssum, and take pleasure in making it bloom steadily until the fall by careful trimming. Petunias, too, are constant bloomers in the borders. For the rest, the zinnias, marigolds, verbenas and larkspurs add the charm of the



It should be of considerable encouragement to the garden beginner to know that this luxuriant bloom is in the second year since planting

old-fashioned garden to part of our yard. One thing that gives success in the small garden is constant cutting of the flowers. It makes the bloom twice as vigorous and much more brilliant.

Even with all this there is room for a little vegetable gardening which is quite sufficient to supply us fresh vegetables for the whole season. On the lawn in front there is no planting, but instead vines are trained on the porch and ferns and palms in porch boxes help to decorate.

D. P. S.

The Garden Water Supply

The matter of an adequate water supply seems to be more and more import-

ant every year. Either the seasons are actually changing, or we are at the dry point in the weather orbit. But even in seasons of ordinary rainfall, there are many times when the lawn, flower-beds and garden would be greatly benefited by a more copious drenching than can possibly be given with the lawn sprinkler or watering can. In the East, the matter of irrigating is barely beginning to be understood and its importance to be realized.

Market-gardeners and others who work on a commercial scale have in isolated cases installed irrigating systems, and in every instance that has come under my notice, with great success. In a small way the home gardener will have to follow suit. We will not in most instances, of course, have enough watering to do to justify his buying a steam-pump or a gasoline engine and an elaborate sprinkling system; but he will find room for ingenuity in analyzing and solving his particular problem, and will earn rich rewards by taking the pains to do it. For the benefit of those who have not before thought of the importance of this matter, I make just a few suggestions to start them thinking, and enable them to get at least a starting point in devising a home irrigating system.

There are four factors which go to the making of such a system,—the water supply, the power with which to force it where it is needed, the means of conducting it and the means of distributing it. In places supplied with city water, there is usually body and force enough to supply it to the grounds directly. It will usually be found better, however, to apply it through an inch or inch-and-a-half hose, than to use the common three-quarter inch size. Let the water run out, if possible, as a stream forced out under pressure is almost sure to work some damage among

(Continued on page 58)



The beautiful effects obtained by using hardy grasses in borders, masses and ornamental effects merit a more extensive use

Ingenuous Devices

LABOR-SAVING SCHEMES AND SHORT CUTS IN THE HOUSE AND IN THE GARDEN

An Oven Convenience

AN accident was the mother of invention of this instance. The oven door of the kitchen range, was originally fitted with one of the big circular thermometers, now found in the majority of modern ranges. The glass enclosing this thermometer was accidentally broken, and on examining it for the purpose of replacing the glass, it was found that the entire thermometer plate could be readily unscrewed from the inside of the oven door. On removing the big circle, with the idea of taking it to a repair man, to be fitted with glass, it was noticed that the open circle in the center of the door gave a very good view of the entire oven.

Immediately the thought occurred that it would be an excellent plan to have the opening simply enclosed with glass instead of replacing the thermometer. It would then be possible to watch the progress of food baking in the oven, without allowing the cold air to enter. This convenience would also avoid the necessity of jarring, in closing the oven door, after examination of the baking—the jarring which so often proves fatal to delicate cakes, souffles and other dishes.

The home-made invention has proven a great convenience, and has made baking day a delight. A tinsmith made the little case for the glass, so that it would fit snugly into the opening originally occupied by the thermometer; it was then screwed into the door, and the thermometer was still found useful, as it was arranged on the side of the oven interior, near the door, where it is possible to note the temperature of the oven while watching the process of the baking.

Since arranging this handy contrivance, it has been learned that it is not a strictly new idea, as some of the modern ranges of today have been fitted with glass-paneled oven doors. But the home-made contrivance can be made to meet the requirements of the great majority of housewives. Not all can afford to install the new range for the sake of the glass doors, but any one can set in a glass panel, or a glass circle, who possesses the very common convenience of the thermometer-fitted oven door.

P. W. H.

A Roofing Suggestion

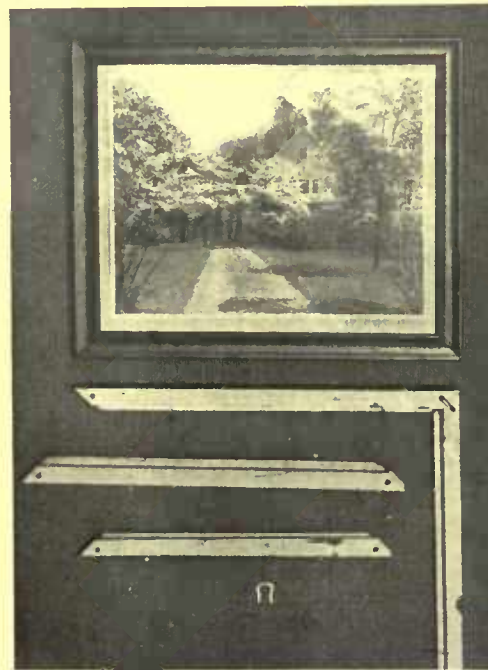
IT is well known how much heat a metal roof radiates in the summertime, and this heat often proves very annoying to the occupants of the dwelling, especially those who have bedrooms whose windows open on the roof. It is of course necessary to have roofs of metal in many instances, and the following simple and effective method was devised to overcome in a large measure the heat radiated. A layer of sheathing paper was placed upon the roof and cov-

ered with a layer of tar paper. Then the metal roof was laid. The results exceeded all expectations; and the cost was very little for the great benefit derived. C. F.

"Knock-Down" Picture Frames

THE use of a new patented moulding, cut in a variety of practicable lengths and correctly mitered so that any two pieces of the same width will fit together, will enable anyone to frame pictures at home without the aid of tools other than a small hammer. The photograph reproduced here represents a picture framed under a glass $6\frac{1}{2} \times 8\frac{1}{2}$ in. Below are shown the reverse sides of the sections of moulding, and the manner in which they are fastened together by staples. For this frame were used two lengths of $\frac{3}{4}$ in. moulding, size $6\frac{1}{2}$ in., and two lengths, size $8\frac{1}{2}$. The entire cost of the frame, including the glass, was forty-five cents. The lengths vary from $3\frac{1}{4}$ to 30 inches.

E. F. A.



The materials and the finished picture frame. Four staples like that shown, hold the moulding strips firmly together

To Hold China in Place

IT is sometimes a problem to know how to make plates stand upon a slippery surface. Plate rails and some buffets are provided with a little groove for holding the china in place—be it plates, or bowls and cups with the decorations inside, which you wish to show.

A clever idea is to make a small semi-circle with sealing-wax wherever you wish a piece of china to stand. This will prevent the plate or bowl from rolling from side to side, as well as making it stand in place.

If the piece of furniture on which you wish to arrange some china be dark or light wood you can match its color with the sealing-wax so that the little support will not be perceptible; white for white finished woodwork, dark brown or green for weathered oak, brown for golden or fumed oak, and so on.

When you wish to change the position of the china it will be easy to scratch the wax off with a pen-knife. The wax will be so brittle that it can be removed without the least damage to the wood.

H. R. M.

A Home-made Polisher

AMONG the recent novelties in household inventions and time-savers, there is a polishing cloth softer and thinner than chamois, guaranteed to be very durable and especially recommended for polishing silverware. It is claimed that the fine silver plated ware and the solid silver can be kept bright and shining by its daily use, without scratching, and without the periodical polishing which gradually injures the plated knives, forks and spoons when used in the form of powder-polishers.

These polishing cloths are supposed to be a new invention; but in reality old-time housekeepers, in the long ago, thoroughly understood their usefulness. They prepared their own polishing cloths, as testified by some of the good old Colonial recipes for caring for the numerous silver articles, in Southern homes famed for their hospitality.

The old recipe for making these time-savers in the form of silver polishing cloths was to boil strong soft rags in a mixture of new milk and hartshorn powder, in the proportion of one ounce of powder to a pint of milk. They were boiled for five minutes, and as soon as they were taken out of the hot mixture they were passed quickly through cold water, so that they could be wrung out immediately. They were squeezed only partially dry and then dried before the fire.

It will be possible for any housewife to prepare her own polishing cloths by following this good old rule; and the writer knows from experience that they are a great convenience for many uses in the kitchen and dining room. After washing and drying the silverware, it is briskly rubbed with one of these polishers; and there is never a spot or blemish that demands a special day set aside for polishing with powder. The bright polish is beautiful and lasting, and it is specially desirable for the large silver pieces. The tea pots, the silver water-pitchers, the old-fashioned urns and fruit dishes, with their elaborate ornamentation, and many treasured heirlooms, may be kept bright and shining with little labor; and the cloths are easily renewed.

P. W. H.

Tarvia

*Preserves Roads
Prevents Dust~*



ENTRANCE TO BRANCH BROOK PARK, NEWARK, N. J., ROADS CONSTRUCTED WITH TARVIA X

Meets Modern Road Requirements

Tarvia is a powerful binder for the surfaces and foundations of macadam roads. It fills the voids and locks the stone in a tough, durable, plastic matrix.

A tarviated surface looks like sheet asphalt and is equally dustless and clean. It sheds water readily and is dry immediately after the rain, so that pedestrians are not inconvenienced. The surface never gets muddy or dusty.

On account of the Tarvia matrix, these roads will bear heavy traffic, because the surface yields, instead of pulverizing under the strains. The Tarvia matrix prevents internal movement and grinding. The plasticity of the Tarvia also makes these roads very quiet.

Horses' hoofs make almost no sound on a Tarviated road. Tarvia is waterproof, and tarviated roads, therefore, are protected against damage from torrents on grades.

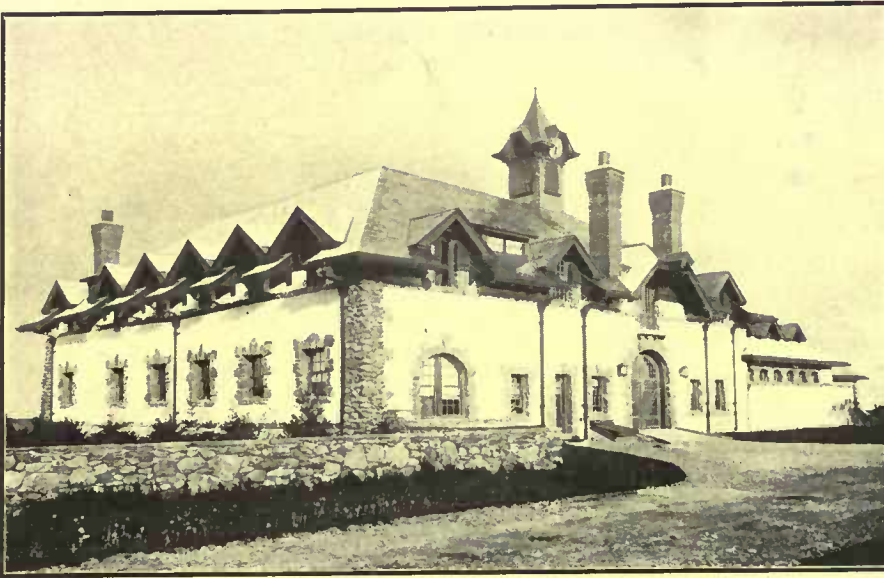
Tarvia has no odor except when being applied. After it hardens, it has no injurious effect on shoes, clothing or vehicles. The cost of using Tarvia is not a factor or consideration, because it has been repeatedly demonstrated that it is cheaper to maintain a dustless road with Tarvia than a dusty one without it. Maintenance economies more than balance the additional cost.

Booklets on request. Address our nearest office.

BARRETT MANUFACTURING COMPANY,

New York, Chicago, Philadelphia, Boston, Cleveland, Cincinnati, St. Louis,
Kansas City, Pittsburg, Minneapolis, New Orleans, Seattle, London, Eng.





Asbestos "Century" Shingle Roof—Stable, Theodore M. Davis, Newport, R. I.; Architect, Theodore Davis Boal, Washington, D. C.; Contractors, Simpson Bros., Corp., Boston, Mass.

For the Sake of Your Building Investment Ask These Four Questions About Every Roofing Material—

1. What protection does it give the building from fire, weather and time?
2. How long will it last?
3. Will it need repairs and painting?
4. What does it cost—including up-keep charges?

And remember this—

ASBESTOS "CENTURY" SHINGLES

"The Roof that Outlives the Building"

are the only truly indestructible roofing known to the building trade. Made of reinforced concrete, compacted by tremendous hydraulic pressure.

Fire cannot burn them—crack, melt, chip or flake them. Rain and moist

climate make them tougher and more elastic. They improve with time.

Asbestos "Century" Shingles are light in weight and are practical. Their first cost is just what you expect to pay for a first-class roof—and they need no repairs or painting.

You can get Asbestos "Century" Shingles in shapes to suit any architectural style—in several sizes—and in three colors: Newport Gray (silver gray), Slate (blue black) and Indian Red. Ask your representative roofer about this indestructible roofing—or write us. Send for booklet C. It will settle your roof problems to your great satisfaction.

The Keasbey & Mattison Company

Factors

Ambler, Pennsylvania

Sun-dials and How to Make Them

(Continued from page 17)

estate of the late Spencer Trask is engraved to better purpose with two variations, by Henry Van Dyke, of the Latin motto, "*Lux et umbra vicissim, sed semper umbra*"—"Light and shadow take turns, but love is always permanent."

One is:

Hours fly,
Flowers die,
New Days,
New Ways
Pass by:
Love stays.

The other:

Time is
Too slow for those who wait,
Too swift for those who fear,
Too long for those who grieve,
Too short for those who rejoice,
But for those who love,
Time is eternity.

The much-used *Non numero horas nisi serenas*—"I count only sunny hours"—bears repeating, for it echos a sanguine sentiment that is peculiarly suitable to the sun-dial. Another old-fashioned line that lays its stress on the serenity of time's march rather than the speed of its flight is the simple "So flies Time away." There are many apt sayings to fit the dial, and the individual can find something pleasing in the delightful book, "Sun-dials and Roses of Yesterday," by Alice Morse Earle.

As the office of the dial is such a dignified and lasting one, it seems out of place to see it upon a slender wooden pillar which quivers or moves at the least foot-step. It wants something solid to be practical. A brick or stone foundation extending below the frost line should be made to fit the base and placed upon this a simple column. The large millstone is sometimes well used as a foundation. Ornate and much carved stone seems to detract from the dial itself, and it has quite enough beauty to look well without decorations, often the expression of artificiality. Sometimes a milestone or boundary post which has outlived other utility can be found to make a very suitable pedestal. The odds and ends of a mason's shop or monument maker's yield stone newel-posts or balusters sometimes of excellent design for this purpose, and if the hunt is fruitless, or the cost of having a pillar made, too high, concrete again makes your dial possible. If you mould it yourself, there is the further pleasure of handicraft to be gained. In many cases, however, the garden supply shops or terra cotta works have much that is reasonable and attractive. Sometimes a tree stump leveled off, or a large boulder, will be just the thing for the garden sun-dial and, if this is right at hand saves the trouble of looking farther. Whatever the style or material, however, simplicity and utility should be the first consideration.

With the design and construction com-

Better Lawns, Flowers and Vegetables with Wizard Brand Pulverized Sheep Manure

Wonderful results quickly. No weeds or foreign grasses. Economical and convenient to use. Unequalled for lawn, flowers, trees, shrubs, fruit, meadows and grain fields. per bbl. freight prepaid east of Missouri River. Cash with order. Ask for quantity prices. Write for copy of booklet "Lawn and Garden." Gives valuable pointers.

THE PULVERIZED MANURE COMPANY
25 Union Stock Yards Chicago
Wizard Brand is handled by first class seedsmen

OPEN FIREPLACE FIXTURES

Andirons, Fenders, Firetools,
Fire Screens and Smokeless Gas Logs

We display a large selection of Period Andirons; also an assortment of reproductions in Old Colonial Andirons, Hob Grates and English Settee Fenders in Brass, Bronze and Wrought Iron. CATALOG SENT ON REQUEST

Frank H. Graf Mfg. Co. Factory and Show Room
323 Seventh Ave., Cor. 28th St., New York

pleted, there are some things to be attended to in the setting up of the dial. The stability has already been spoken of, and the next thing to do is to see that the dial is absolutely level or parallel with the plane of the earth. A good spirit-level will inform you of the slightest deviation from the true line and the dial should not become permanent until this is accomplished. The gnomon should then be exactly at right angles to the dial face. When set in place, the twelve o'clock line should run in a vertical north and south plane, with the point of the gnomon farthest from the dial-face, pointing true north, not at the magnetic north. A compass will serve to set the dial if the magnetic declination for the locality is known.

If these conditions are complied with, the dial becomes a fairly accurate time keeper, but it is not absolute, for on only four days of the year, April 15th, June 15th, September 2nd and December 24th, the sun time agrees with the clock time or mean time. The time equation, the mean between clock and sun time, found in the nautical almanac, can be used to correct the dial, and a scale of minutes to add and subtract made and attached to some part of the dial pedestal. As a time keeper for the garden, it serves its purpose well enough, for the greatset difference it is capable of is sixteen minutes, and when one considers that it goes for life without winding or setting, it may be considered just as true as many clocks and pardoned for the variation.

A word on the location of the dial may be pertinent here. We often think of it as situated in the formal garden, but its use is by no means limited to that, although it fits so well there. Often the junction of two paths seems to fit it well. Whether in formal surroundings or in the ordinary garden, a background of dark foliage, rhododendrons or cedars, makes a beautiful situation for it and reflects its beauty and stateliness. When placed in the lawn, where it often appears to advantage, low-growing plants sometimes look well at its base and seem to unite it and the surroundings. If a stone or tree stump is used for support, planting is necessary and pleasing. No vines or shrubs should be used to climb over the dial or render its approach and reading difficult. There always ought to be some favorite nook in the garden with a bench for rest or reading and an air of seclusion about it. The best loved flowers should be here, and here the sun-dial should preside. The thoughts that are associated with it, the sage advice of its motto and the sentiments it connotes should make such a retreat ideal when one wishes to withdraw into the spirit of the garden.

When the dial has become part of the garden and the vines have grown about it and it seems to be as old as the time it marks, then will it be truly appreciated. Then the criticism that the use of sundials is a return to obsolete and supplanted objects, cannot hold. Besides, where is the clock that stands wind and weather

A June Suggestion

Nabisco Sugar Wafers Play an important part during the month of brides and roses.

NABISCO Sugar Wafers

served with ices, frozen puddings and beverages, add the final touch of elegance and hospitality to every repast—simple or elaborate.

In ten cent tins

Also in twenty-five cent tins

**NATIONAL BISCUIT
COMPANY**



Interior Decoration

Furnishings of all kinds selected and arranged in the most up-to-date and attractive manner. Out-of-town orders carefully attended to.

MISS THROOP—MISS VEERHOFF
37 EAST 60th STREET :: NEW YORK

Landscape Gardening



Prof. Craig

A course for Homemakers and Gardeners taught by Prof. Craig and Prof. Batchelor, of Cornell University.

Gardeners who understand up-to-date methods and practice are in demand for the best positions.

A knowledge of Landscape Gardening is indispensable to those who would have the pleasantest home.

250 page Catalog free. Write to-day.

THE HOME CORRESPONDENCE SCHOOL
Dept. 226, Springfield, Mass.



You know
this as
well as
I do—

that the average
cigaret is not a
smoking proposition,
but a *selling* proposition.

*The Makaroff business is
different.* I started the manu-
facture of

Makaroff Russian Cigarets

because that was the only way I could be sure of getting *the kind of*
cigarets I wanted. It has grown because there are a lot of
other folks who want *that kind of* a cigaret. And the number
grows just as fast as people find out *what kind of* a cigaret
Makaroff is.

Just let this fact sink into your consciousness and stay there—*this business*
is and *always will be* operated to make a *certain kind of* cigarettes—not merely to
do a certain *amount of* business. I always have believed that if we produced
the quality, the public would produce the sales. And that faith has been
justified. Makaroffs are really different from other cigarettes—and the differ-
ence is all in your favor.

You will find that you can smoke as many Makaroffs as you want with-
out any of the nervousness, depression or "craving" that follows the use of
ordinary cigarettes.

Makaroffs are absolutely pure, clean, sweet, mild *tobacco, untouched by*
anything whatever to give them artificial flavor, sweetness, or to make
them burn.

Pure tobacco won't hurt you. You may not be used to it, and you may not
like the first Makaroff, but you'll like the second one better, and you'll stick
to Makaroffs forever if you once give them a fair chance. We have built
this business on quality in the goods and intelligence in the smoker—a com-
bination that simply can't lose.

No. 15 is 15 Cents—No. 25 is a Quarter
Plain or Cork Tips

Makaroff - Boston

Mail address, 18 Elm Street—Bos.on, Mass.

Ask
Your
Dealer

Ask
Your
Dealer

and needs no key or winder? The mes-
sage of the dial, however, is its greatest
service, especially in a time when senti-
ment is deemed a weakness, for, to quote
Lamb again, "It spoke of moderate labors,
of pleasures not protracted after sunset, of
temperance and good hours." Surely it is
not out of place to-day.



How the Japanese Arrange Flowers

(Continued from page 19)

opening the *shogi*, or rice paper translu-
cency, he looked into the garden to note
that the morning-glories were all re-
moved. Disappointed, he closed the *shogi*
doors again. Rikiu, who had watched his
action with a gentle smile, pointed to a
tiny vase in the corner of an alcove. It
contained a single, rarely beautiful morn-
ing-glori. Said the master of the tea
ceremony: "This flower is all that is
needed for external adornment. Now
concentrate your attention upon the tea."

The feeling for simplicity and restraint
that inhibits vulgar display and garish-
ness in all the domestic arts of Japan is
nowhere better illustrated than in this
anecdote of Rikiu, the great promulgator
of *ikebana*. Schools of varying practices
and methods have sprung up since his
day, but all are true to the essential prin-
ciples that beauty should not be sub-
merged in profusion.

There are other principles in which all
the sects of *ikebana* agree. They unite in
teaching their followers to avoid what are
called "the seven diseases of flower ar-
rangement," prohibitions which forbid the
crossing of stems, the protrusion of
blooms in front of calyxes, and other
technicalities of arrangement.

On the constructive side every student
of *ikebana* learns to employ variations of
the *ten-chi-jin*, a triangular scheme with
symbolical meanings implicit in the ar-
rangement. In seeking to make flowers
or foliage conform to this plan every
Japanese understands that the apex of the
triangle (*ten*) symbolizes heaven, the pro-
truding point (*jin*), humanity, and the
point at which the vertical base of the tri-
angle is bisected (*chi*), the earth. Con-
tours should, if possible, be so disposed
that earth will seem to look toward man
and man toward heaven. The *ten-chi-jin*
motive is repeated in almost countless
ways wherever Japanese folk come to-
gether, and sometimes when some fair or
manly follower of a cult of flower ar-
rangement has been particularly success-
ful in a novel application of the ancient
convention you may see a whole group
of people bow down reverently before the
creation.

The lesson for Americans in this artis-
tic and scientific expression of the Japa-
nese passion for floral decoration is, of
course, one of suggestion rather than
adaptation. The importance attributed in
Japan to an art that we do not recognize

GOING TO BUILD? READ THIS!



FROM NO. 3 BOOK
You will find in our books just the design you are looking
for. All PRACTICAL and ESTIMATES ACCURATE
OUR BOOKS
No. 1. 25 designs of residences costing \$1,500 to \$5,000 50c
No. 2. 25 designs of residences costing \$5,000 to \$20,000 50c
No. 3. 25 designs of up-to-date concrete residences, costing
\$2,000 to \$22,000 50c
All three books at \$1.25. Plans furnished at popular prices. We submit sketches
on request for any type of building. Books sent prepaid on receipt of price.
ARTHUR G. LINDLEY CO., Architects, SCHENECTADY, N. Y.
19 Years' Practical Experience. References.

ANTIQUE FURNITURE

Rare China, Pewter,
Old Lamps, Andirons, Etc

NO REPRODUCTIONS

HENRY V. WEIL

698 Lexington Avenue

Cor. 57th Street

New York

as even a minor art can hardly be comprehended here. Yet not on that account is it less vitally significant among the people who practice it. The causes of the glorious flowering forth of all the arts in Japan during many centuries, and with surprisingly few periods of decadence, are to be sought in the truth that basically all life is art and that this keenly sensitive people endeavor to make the simplest, most ordinary arts of living an expression of fine art.



Possibilities in Half-timbered Houses

(Continued from page 25)

have been monotonous and weak looking. As it is, it seems to be well locked together. The horizontal beams on a line with the window sills, carried across the face of the building, and the horizontal beam a little below the overhang in the central gable, make a number of small square, or nearly square, panels forming an agreeable checkered motive.

Diagonal timbers crossing and halved into vertical posts are both pleasing and useful. Sometimes diagonals running in opposite directions cross saltire-wise and make an elongated St. Andrew's cross. This device, of course, adds strength and materially helps the decoration. In several bays of the Port Sunlight houses parallel diagonal timbers, convergent towards the central vertical and horizontal beams, have been happily used and give the whole bay a lozenge-shaped look. Alternate bays of diagonals interchanging with post and panel work extending across the face of the building prevent monotony and destroy all danger of hardness of lines. A still further method of securing variety is by the use of a number of smaller panels under windows. In the Essex Fells house the spaces under a number of the windows have been filled by small panels in which two divergent diagonals and a short upright beam spring fan-wise from a common base. In the gables of the Stanley house in Chester, on each side of the vertical post running from the sill of the overhang to the peak of the gables, are parallel flamboyant curved beams springing from the central post and from the sill. The effect is airy and wavy. Too many decorative motives in timber work should not be brought together in the same house or the whole appearance becomes macaronic.

Attention must be called to the pins and bolts that fasten the timbers together. It is ever the little things that make the big things, and we cannot be too careful in a nice adjustment of the smallest details if we would have the ensemble wholly successful. The treatment of the pins and bolts on the Port Sunlight houses well exemplifies the importance of heeding this small matter.



The Good Road For Universal Service!

Every man's home faces on a road which connects with every other road and leads to every other home throughout the whole land.

Main highways connect with cross-roads so that a man can go where he chooses, easily and comfortably if conditions are favorable. But the going is not always the same; some roads are good—some are bad.

The experts in the South illustrate the difference by showing four mules drawing two bales of cotton slowly over a poor, muddy cross-road, and two mules drawing eight bales of cotton rapidly over a first-class macadam highway.

The Bell Telephone lines are the roads over which the speech of the nation passes.

The highways and byways of personal communication are the 12,000,000 miles of wire connecting 6,000,000 telephones in homes on these highways. Steadily the lines are being extended to every man's home.

The public demands that all the roads of talk shall be good roads. It is not enough to have a system that is universal; there must be macadamized highways for talk all the way to every man's home. A single section of bad telephone line is enough to block communication or confine it to the immediate locality.

Good going on the telephone lines is only possible with one policy and one system. Good going everywhere, at all times, is the aim of the Bell system.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY AND ASSOCIATED COMPANIES

One Policy

One System

Universal Service



PRICES marked in plain figures will always be found **EXCEEDINGLY LOW** when compared with the best values obtainable elsewhere.

GEO. C. FLINT CO.

43-47 W. 23rd ST.

24-28 W. 24th ST.

U-ALL-NO.

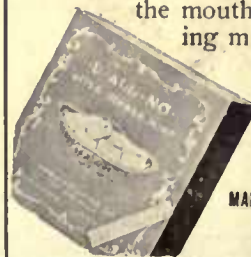
'AFTER DINNER MINT'

Temptingly dainty creams that melt in the mouth, leaving a refreshing mint flavor.

*Sold only in tin boxes,
never sold in bulk*

We also manufacture
**U-All-No Mint
Chewing Gum**

MANUFACTURING CO. OF AMERICA
463 North 12th St.
Philadelphia, U. S. A.



YALE

means

YALE & TOWNE

and that means

QUALITY

IT means Yale Cylinder Locks and Latches, Yale Padlocks, Blount and Yale Door Checks, Builders' Hardware.

It means products that are today Standard all over the world wherever people live in houses.

It means the largest establishment in the world devoted to the manufacture of Builders' Hardware.

Any Hardware Dealer can supply Yale Products.

*Let us send you—free—our book about
"Yale Hardware for Your Home."*

The Yale & Towne Mfg. Co.

The makers of Yale Products
Locks, Padlocks, Builders' Hardware,
Door Checks and Chain Hoists

9 Murray Street Local Offices: Chicago, Boston,
San Francisco,
New York, U. S. A. London, Paris and Hamburg

A logical and legitimate field for ornamentation in the shape of carving is found in the beam ends, corbels and brackets. This ornamentation may be simple as in the beam ends forming the corbels to support the central bay and the brackets supporting the gable in the house at Abington, or it may be very elaborate as in the Stanley house in Chester where corbels, brackets, console beams and pilasters are all richly carved as they also are in the shop buildings shown in St. Werburg's Street. Good taste alone can set limits to the amount of carving to be indulged in. Certainly a reasonable amount of it is desirable.

The "pugging" to stop up the spaces between the timbers offers a chance to display originality in its use both as regards material and color. In the cottage at Lingfield, Surrey, the panels are "pugged" with brick laid in herring-bone pattern. Other patterns in brick may be effectively used also. Then there is almost no end to the variety to be had from different kinds of plaster and stucco and even tiles may be requisitioned. In some instances the plaster has been roughly frescoed. Nearly as much opportunity for decorative invention is opened up by the pugging as by the timber treatment. One caution, however, must be heeded if you would avoid disastrous results. See that the pugging is most carefully placed and due precautions taken to prevent an embarrassing and unsightly shrinkage. To compass this end the plasterer must know his business thoroughly.



The Birds and Butterflies of a Suburban Garden

(Continued from page 31)

dreaming that it should end so disastrously for both. The Skipper is a saucy, pert little fellow with uptilted wings, dodging here and there in a tipsy, zigzag flight which makes it almost impossible to catch him. Like the Admiral he wears epaulets of orange and his somber brown uniform bears little else in the way of ornament; but he is decorated with a silver medal, no doubt awarded to some far away ancestor for bravery, and cherished and proudly displayed by every descendant. He does not intend that it shall escape your notice for he never fails to carry his wings upright to display it in the best manner. The wistaria and the locust furnish his food in the early stages of his existence.

One of the most interesting of all the butterflies, especially to our visitor and his friends, was the *Grapta interrogationis*, or the Question-sign Butterfly. A subtle comradeship seemed to be established between this little rover, who bore upon his under wings the silver question mark, and the lads who were struggling with the rules of grammar. He wore a full orange

GARDEN



POTTERY

Catalog on Request

ATLANTIC
TERRA COTTA
COMPANY

Landscape Pottery Dept.

1170 BROADWAY, N.Y.

SunDialShop

Antiques
Interior Decoration



MRS. HERBERT NELSON CURTIS

22 East 34th Street

NEW YORK CITY

TELEPHONE 2970 MADISON

and brown coat, under which his seal brown waistcoat appeared, and the cut of his garments suggested the curving blade of a sickle. The elm tree boughs are his swinging cradle, though he sometimes indulges in nettle or hop, as a bit of a relish.

About midsummer the parsley had become the prey of some brilliant green caterpillars, crossed with bars of jet black and gold; gorgeous creatures and beautiful, if one could forget his natural antipathy to crawling things. However, as the parsley was rapidly disappearing under the voracious appetites of the invaders, they were disposed of as quickly as possible. Some, however, must have escaped, for we found one specimen of the *Papilio asterias*, or common Eastern swallow-tail, and were obliged to confess that he was much more attractive in his winged form than when gorging himself upon our parsley. All black with a double row of yellow spots edging both wings, and a touch of dull blue and orange near the swallow-tails, he was one of the most conspicuous of the flower visitors.

The *Papilio turnus* was our next captive, rightfully called the Lordly Turnus, or the Tiger Swallow-tail. His large size and his brilliant yellow color, with tiger-like markings of black, make him a commanding figure in the butterfly kingdom. He must have found his way to our garden from the park, where alders and willows, which are his food, fringe the edge of the lake.

One of the most difficult butterflies to classify was the little *Batesi phyciodes*, or Bates Crescent-spot. There are so many of these butterflies with nearly the same markings that we found it a difficult matter to determine where he belonged. We found only this one specimen in our garden, and concluded it must be a rare one, since the early stages were said to be unknown.

Of the tortoise-shell butterflies we found only one, the *Vanessa milberti*, with his brown shell-like coat and orange-red band. A little fellow, resembling somewhat the red Admiral, and living upon the same sharp food, the nettle.

With the late fall, when leaves were brown and squirrels and partridges were out, came the Hunter's butterfly (*Pyrameis huntera*) not with gun and shot, but sailing upon softly tinted wings of mottled orange above, but underneath holding a surprise in the soft grays of leafless woods and bare branches, and the dull pinks of faded leaves—a brave little Hunter finding only here and there a flower-cup of nectar to quench his thirst, but facing the inevitable cold and frost of winter with dancing wings.

There were many other tiny winged creatures that were caught and studied, during that summer vacation; the dragon flies and cicadas and katydids and the moths that flew only at night. Only one, perhaps, is worthy of mention, the beautiful *Ilia Underwing*, whose outer wings so closely resemble the bark of the tree,

LEAVENS FURNITURE



Is distinguished from the "ordinary" by three predominating features:

First—Its solid construction, withstanding the most strenuous usage.

Second—The simple artistic lines of the designs, conforming with ideas of the most discriminating.

Third—Custom finishes to suit the individual taste and harmonize with the surroundings.

No home furnished with "Leavens made" furniture can be criticised for lack of good taste or refinement.

Moderate prices prevail on our entire stock. Careful shipments made, insuring safe delivery.

Send for full set of over 200 illustrations



WM. LEAVENS & CO., Mfrs., 32 Canal Street, Boston, Mass.

A SUMMER PARADISE *in the* EMPIRE STATE

ADIRONDACK PARK
GREAT NORTH WOODS

NEW YORK

MONTREAL
PLATTSBURG
HOTEL CHAMPLAIN
AUSABLE FORKS
LAKE PLACID
WESTPORT
TICONDEROGA
NORTH CREEK
LAKE GEORGE
FT. WM. HENRY HOTEL
SARATOGA SPRINGS
TROY
ALBANY
SCHENECTADY
SHARON SPRINGS
COOPERSTOWN
BINGHAMTON

NATURAL CHARM *plus* ACCESSIBILITY

Send today for
Tourist Guide (360 pp)
six cents postage.
A.A. Heard, G.P.A. Albany

DELAWARE & HUDSON



Make your porch a pleasant outdoor living room

Make it a pleasant, shady spot where you get the benefit of all the breezes that blow, yet the heat of the day is shut out. You can do this by using

Komi Green Painted Porch Curtains

You can see out through them, yet outsiders cannot see you—you have perfect privacy. Ask your dealer to show you the "Komi" Curtains and tell you how little it will cost to fit out your porch with them. If your dealer cannot do this, write to us for the name of a dealer near you who can.

R. H. COMEY CO., Camden, N. J.
Chicago, 2440 to 2448 Washburn Ave.



THIS BEAUTIFUL DIAL (Complete) for \$10

Pompeian stone pedestal and hand-chased brass sundial adjusted to latitude of purchaser. Pedestal 35 in. high; Dial 8 in. diameter. Price \$10.00, F. O. B. New York; or freight paid to any point in the U. S. east of Mississippi River for \$1.00 additional.

Special offer, will not be repeated

THE ERKINS STUDIOS

226 LEXINGTON AVE., NEW YORK

The Largest Manufacturers of Garden Furniture in America



WHY REPLACE ROTTEN WOOD WITH WOOD THAT WILL ROT?

When you repair the roof, the porch, the barn, the fence, or anything else, **WHY, OH, WHY DON'T YOU INSIST ON**

CYPRESS

"THE WOOD ETERNAL"

CYPRESS DEFIES ALL ROT INFLUENCES. Get your CYPRESS ("and no substitutes!") from your nearest Lumber Dealer. Write our "All-round Helps Dept." TODAY. Tell us your plans—and needs—and we'll send you at once the Vol. of Cypress Pocket Library that fits your case. (Full of VALUABLE POINTERS.)
So. Cypress Mfrs. Assn. DEPT. 1210 New Orleans, La.

upon which it hides during the day; but whose under wings are of the richest salmon pink with two broad bands of black. If it is true, as the Japanese say, that "the gods see everywhere," we hope that this beautiful color is not unobserved, though hidden from the sight of the daylight stroller.

When our visitor's summer vacation finally drew to a close we found that our little pool had provided a full season of entertainment and instruction. We all enjoyed the visits of birds and butterflies with their brilliant colorings, and learned something of their delightful history. Truly our garden ornament was a satisfactory experiment.



Grow Your Own Fruit

(Continued from page 27)

be more comfortable. The blackcaps (and a few of the reds, like Cuthbert) throw out fruiting side branches, which should be cut back in spring one-half to two-thirds their length.

Of raspberry enemies, the most troublesome is the "orange rust." It attacks the blackberry also. No effective remedy has yet been found. Pull up and burn at once all affected plants. On newly set beds, our old friend the cut-worm may prove destructive. Search for him in the dirt at the foot of the cut-off canes, and serve him wheat bran mash with Paris green (a teaspoonful in a quart of water with the bran mixed in). In some sections the raspberry borer—the lava of a small, flattish, red-necked beetle—does considerable damage. He bores in the canes in summer, causing "galls" on the briars, and finally killing them. Cut and burn.

The varieties of the raspberry are numerous, but the following include the best. Of the blackcaps, Palmer (very early), Gregg, McCormick, Munger, Cumberland, Columbian and Eureka (latest). Of reds, The King (extra early), Cuthbert, Turner, Reliance, Cardinal (new), and London (late). Yellow, Golden Queen.

THE BLACKBERRY

If there is any variation in the soil picked out for the berry patch, give the driest place to the blackberries, as lack of moisture effects raspberries more seriously. Blackberries do not need the soil quite so thoroughly enriched as do raspberries, and a surplus of plant-food, especially of nitrogen, may keep the vines from ripening up thoroughly in the fall, which is essential for good crops. If growing too rankly, they should be pinched back in late August. When tying the vines up to supports in the spring, cut back the main canes to four or five feet, and the laterals to not more than a foot and a half.

The enemies of the blackberry are not often serious, if the plants are well cared



Distinctive Lamps

Handel Lamps are striking and artistic in design. The colors blend perfectly, making the light soft and attractive. The entire effect is one of elegance and good taste. There is a Handel Lamp to harmonize with the color scheme of any room.

(Style No. 5351, illustrated above, is for the burning of oil. It affords the mellow glow so characteristic of a perfect oil lamp. It is especially suitable for the country home. Price \$20 (for oil and electricity \$5 additional).

Leading jewelers and lighting fixture dealers sell Handel Lamps (for gas, electricity, or oil). Write us for the name of the Handel dealer in your town, also giving your dealer's name. We will send you our handsome Catalogue, containing helpful suggestions for good lighting and illustrating the many styles of Handel Lamps and Fixtures.

THE HANDEL COMPANY

390 E. Main Street Meriden, Conn.
New York Showrooms, 64 Murray Street.

Smoky Fireplaces

Made to Draw

Your particular chimney problem studied by experts, and estimates given without charge. The work is undertaken with this understanding: **We will not accept payment unless successful.** Kitchen ventilating systems, preventing cooking odors.

FREDERIC B. WHITLEY Engineer and Contractor
215 Fulton Street, Brooklyn, N. Y.

Pergolas Ready To Set Up



One of our Pergolas as erected

NOTHING so helps the appearance of a garden, or gives the desired character to a house like a well designed pergola.

We ship them in crated sections with simple instructions that will enable

anyone handy with tools to assemble them quickly and easily. Planned by an experienced architect, they are of absolutely correct design and attractive appearance. Price, \$40.00 up.

Our catalog also shows gateways, boundary markers, posts, etc. Send for it today.

The Pergola Company
923 Association Building, Chicago

for. The most dangerous is the rust or blight, for which there is no cure but carefully pulling and burning the plants as fast as infested. Another is the blackberry-bush borer, whose presence is indicated by wilting, and a change in color in the canes which should at once be cut and burned. Another pest which has appeared but recently is the bramble flea-louse, which resembles the green aphid, except that it is a brisk jumper like the flea beetle of potato vines and turnips. The leaves of infested plants twist and curl up in summer, affording protection to the enemy, and do not drop off in the fall. Early on cold mornings, or in wet weather, when the insects are sluggish, cut out all shoots upon which any are to be found, collect them in a tight bottomed box, and burn.

As with other small fruits, so many varieties of the blackberry are being introduced that it is difficult to give a list of the best. Any selection from the following, however, will prove satisfactory for home use, as they are all tried and true,—Early King, Early Harvest, Wilson Junior, Kittatenny, Rathburn, Snyder and Erie.

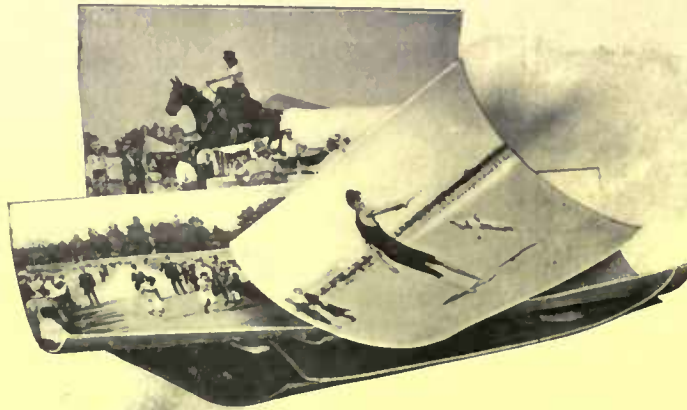
The Dewberry is really a blackberry, that can be trained and requires the same culture. As the vines are naturally slender and trailing, in garden culture it must be supported. The canes may be staked or wired up, as with blackberries, or a wooden barrel-hoop, held by two stakes, makes a good support. The dewberry ripens ten days or more before the blackberry, and for that reason at least a few plants should be included in the berry patch. The varieties are few, Premo being the earliest and Lucretia the best known.

CURRENTS AND GOOSEBERRIES.

The two most important of the bush fruits, the currant and the gooseberry, are very similar in their requirements of soil and culture. A deep rich moist soil—approaching a clayey loam—is the best. There is no danger of overfeeding them, although where manure is used it should be well rotted up.

The long-suffering currant will stand probably more abuse than any plant in the home garden—and is frequently the most neglected. Although the currant is so hardy, no fruit will respond more quickly to good care. Plenty of room, plenty of air, plenty of moisture,—secured when necessary by a mulch of soil or other material in hot, dry weather—are all essential to getting the best from the currant bush.

Four or five feet each way is not too much space to give the currant. The soil should be manured liberally, and well worked before planting. Do not think that you can dig out a little hole just big enough for the roots, leaving the rest of the ground unturned and unenriched, and get good results. Keep the soil between the bushes well cultivated. As the hot, dry season comes on, mulch the soil if you would be certain of a full-sized, full fla-



To get the best results with your camera, it is absolutely essential to equip it with a

Bausch and Lomb Zeiss TESSAR LENS

Nothing can equal its all around efficiency—its great light-gathering power and sharp definition. It helps the amateur by extending the scope of his work and appeals equally to the man of wide photographic experience.

Booklet L treats of better photography in an interesting manner. Write for it today.



Our name, backed by over half a century of experience, is on all our products—lenses, microscopes, field glasses, projection apparatus, engineering and other scientific instruments.

Bausch & Lomb Optical Co.
NEW YORK WASHINGTON CHICAGO SAN FRANCISCO
LONDON ROCHESTER, N.Y. FRANKFURT

Ornamental Fixtures for Country Grounds



The choice of a fountain should be guided by the space at your disposal and the quantity of water available. The illustration shows an artistic effect adapted to most conditions.

Our fountains include a wide variety of artistic designs. We also supply special designs for all requirements.

We issue separate catalogues of Display Fountains, Drinking Fountains, Electroliers, Vases, Grills and Gateways, Settees and Chairs, Statuary, Aquariums, Tree Guards, Sanitary Fittings for Stable and Cow Barns.

Address Ornamental Iron Department

J. L. MOTT IRON WORKS, Fifth Avenue and 17th Street, NEW YORK



Modern Sleeping Porch fitted with Wilson's Blinds.

Practically makes an Outdoor room of the ordinary porch: a room at night, a porch by day.

Wilson's Venetians

for outside and inside of town and country houses very durable, convenient and artistic.



Special Outside Venetians
most practical and useful form of Venetian yet devised for porches and windows; exclude the sun; admit the breeze:

Write for Catalogue "Venetian No. 3."
Orders should be placed now.

Jas. G. Wilson Mfg. Co.
1, 3 & 5 West 29th St., New York
Inside Venetians, Rolling Partitions,
Rolling Steel Shutters, Burglar and
Fireproof Steel Curtains, Wood
Block Floors.

SAMSON SPOT CORD



For Sash Cord. Will outwear common roughly braided cord or metallic devices many times over. The smooth, even braid minimizes abrasion and prolongs wear.

For Clothes Line. Will not kink, stretch or ravel, or stain the clothes, and is guaranteed to last at least five years even when permanently exposed to the weather. Look for our trade-mark, the Spots on the Cord.

Send for samples. Carried by all leading dealers.
SAMSON CORDAGE WORKS, BOSTON, MASS.

Country Homes

remote from "town" demand every possible protection against unwelcome visitors.

Have you a Smith & Wesson revolver in your home?



We want you to have our beautiful booklet. Send for it today.

SMITH & WESSON
MANUFACTURERS of SUPERIOR REVOLVERS

420 Stockbridge Street
SPRINGFIELD, MASS.

vored crop. Two bushes well cared for will yield more than a dozen half neglected ones. The currant suffers from excessive heat and dryness, but with proper attention a full crop should be secured every year.

As with the other small fruits, a most important factor in growing currants is proper pruning. The most convenient and satisfactory way is to keep it in bush form. Set the plants singly, at the distance previously mentioned, and so cut all new growth, which is produced generously by the currant, as to retain a uniform bush shape, preferably somewhat open in the center. Another thing to keep in mind when pruning is that the fruit is borne on wood two or more years old, so all wood should be removed either when very small, or not until four or five years old. All that is allowed to grow one or two years and then removed, is just that much of the plant's energy wasted. Therefore, in pruning currants, take out (1) superfluous young growth; (2) old, hard wood (as new wood will produce better fruit); (3) all weak, broken, dead or diseased shoots; (4) during late summer, keep the tips of the new growth pinched off, which will cause them to ripen up better, resulting in more fruit when they bear; (5) maintain a good bush form, go over the whole plant lightly in the fall, trimming the desired shape—but do not cut back more than one-third.

Under some special circumstances, as where space is limited and they must be grown close against a wall, it may be advisable to train to one or two a few main stems. This, however, increases the danger of loss from the currant borer.

The black currant is entirely different from the red and white currants. It is used almost exclusively for culinary purposes, or preserving. The plants are much larger, and should be put five or six feet apart. Some of the fruit is borne on one-year old wood, so the new shoots should not be cut back. The old wood, also, bears as good fruit as does the new growth, so there is no need to cut it out until the plant is getting crowded. As the wood is much heavier and stronger than that of the other currants, it is advisable gradually to develop the black currants into the tree form.

The common green currant worm is the worst pest encountered in growing currants. His appearance will be indicated by holes eaten in the lower leaves early in spring—generally before the plants bloom. Spray at once with Paris green in water (1 lb. to 50 gals.) or with arsenate of lead (2 lbs. to 50 gals. water). If a second lot appear after the fruit sets, dust with white hebeore. By the time the fruit ripens, this will probably have been washed off by the rains; if not, wipe from the fruit. For the currant borer, cut out and burn every infested shoot. Examine the bushes carefully late in the fall; those in which the borers are at work will usually have a wilted look, and be of a brownish color, readily distinguished.

UNDERFEED HEATING Investment

Save 1/2 to 2/3 of Coal Bills

THE most sensible thing to do in summer is to get rid of old, unsatisfactory heating systems and install one that will not only pay for itself but add to the renting or selling value of any building.

THE PECK-WILLIAMSON UNDERFEED HEATING SYSTEMS

Warm Air Furnaces--Hot Water or Steam Boilers

insure clean, even heat at least cost, because they burn cheapest slack and pea or buckwheat sizes of hard and soft coal, which would smother fire in ordinary heating plants. Consume smoke.

H. J. Hanizon, 301 Hazlett Ave., Canton, Ohio, writes: "Have used an Underfeed five years. Best furnace I ever heard of. Gives even temperature at all times. We have June weather in our home all winter of coal cost that has never exceeded \$14 for heating eight rooms all season."

Heating plans of our Engineering Corps are FREE. Fill in the coupon below and return TODAY for FREE booklets and fac-simile testimonials.

THE PECK-WILLIAMSON CO. 442 W. Fifth St. Cincinnati, O.

I would like to know more about how to cut down the cost of my coal bills from 50% to 66%. Send me—FREE

UNDERFEED Furnace Booklet (Indicate by X Booklet you desire)
Boiler Booklet

Name _____

Address _____

Name of your dealer.

Ornamental Foliage Plants



ALOCASIA ARGYREA

We make a specialty of choice collections for Greenhouse as well as everything in the line of decorative trees and plants.

Visit our nurseries or send for descriptive catalogue of Nursery Stock and Greenhouse plants.

Experienced and Competent Gardeners

Any lady or gentleman requiring their services can have them by applying to us. No fees. Please give particulars regarding place.

Julius Roehrs Co., Exotic Nurseries, Rutherford, N. J.



FOR summer resorts which want clean bathing places, sporting clubs where weeds interfere with power boats, ponds or lakes where ice is harvested or any water where weeds are undesirable—Ziemann's Submarine Weed-Cutting Saw is indispensable. Easily operated from the banks or on greater lakes just as well from boats and very large spaces cleared in shortest time.

Write for illustrated circular which explains how it works and good references.

ASCHERT BROS., Cedar Lake, West Bend, Wis.

Have You Seen The Latest Garden Novelties?



THEY include musical Garden ornaments, concealed lawn chimes, combined rose bush fountains with chimes with or without electric illumination. Smaller models for table decoration. These novelties are placed on the market this season for the first time. These chimes can be concealed by flowers or vines, and the least breath of air will produce



the sweetest tones, coming apparently from a distance. We also have a full line of all kinds of garden furniture, vases, settees, fountains and all other garden beautifiers. Write for Catalogue.

AMERICAN GARDEN BEAUTIFYING COMPANY
430 4th Avenue, NEW YORK
A. S. JAKOBSON, Inventor.

Of the varieties, Red Dutch, while older and smaller than some of the new sorts, is hardier and not so likely to be injured by the borer. London Market, Fay's Prolific, Perfection (new), and Prince Albert, are all good sorts. White Grape is the most popular white kind. Naples and Lee's Prolific are good blacks.

THE GOOSEBERRY.

The gooseberry required practically the same treatment as the currant received. It is even more important that the coolest, airiest location available be given to it, and the most moist soil. Even a partially shaded location will serve, but in this case extra care must be used in guarding against that often fatal enemy of the gooseberry—the mildew. Summer mulching, to retain moisture, is, of course, of special benefit.

In pruning the gooseberry, as with the black currant, it is best to cut out to a very few or even to a single stem. Keep the head open to allow the air to circulate freely and reach every twig and branch. The extent of pruning, besides being a precaution against the mildew, will also determine largely the size of the fruit; if berries of the largest size are wanted, prune out severely. All branches drooping to the ground, and all which cross or grow together, should be removed.

The enemies of the gooseberry are the currant worm, borer and mildew. The first two are treated as already described. The gooseberry mildew is a dirty, whitish fungous growth covering both fruit and leaves. It is especially destructive of the foreign varieties, the cultivation of which, until the advent of the potassium sulphide spray, had in many localities been practically abandoned. For this spray, use 1 oz. of potassium sulphide (liver of sulphur) to 2 gals. of water, and mix just before using. Spray three or four times a month, from the opening of the blossoms until the fruit is ripe.

The native gooseberries are the hardiest. Of these Downing and Houghton's Seedling are the best. Industry is an English variety which does well here. Golden Prolific, Champion and Columbus are other good foreign sorts—if care is taken to successfully fight off the mildew.

The gooseberry completes the list of the common small fruits. If your garden has heretofore been devoid of them, do not fail another season to try them all. They are all easily obtained, none of them cost more than a few cents apiece, and a very small number will keep the family table well supplied with healthy delicacies; and you can grow them better at home than you can buy them. While the work may at present be unfamiliar to you, do not be deterred by that. The various operations of setting out, pruning and spraying, will soon be as familiar to you as those in the vegetable have become. They are really much less complicated than the latter. There is no reason why every home garden should not have its few rows of small fruits, yielding their delicious harvests in abundance.



THE TWO GARDENS

One is a thing of beauty for a few short months; the other, enclosed in glass, is a joy all around the calendar.

Thousands of plants for this formal garden were grown in the greenhouse—many of them will be removed to its protection during the colder months. And so in this and a hundred and one other ways, is the greenhouse a necessity and an unending satisfaction.

This one is located in Tuxedo Park, N. Y. We co-operated with Donn Barber, the architect, in developing and carrying out the scheme.

If you are interested in having a greenhouse, whether large or small, take it up with us. We are an old established firm who thoroughly understand greenhouse designing and building.

Write to the
Main Offices and Factory:
Elizabeth, N. J.
or call at
1170 Broadway New York

Hitchings & Company,

De Olde Rumford Fire Place



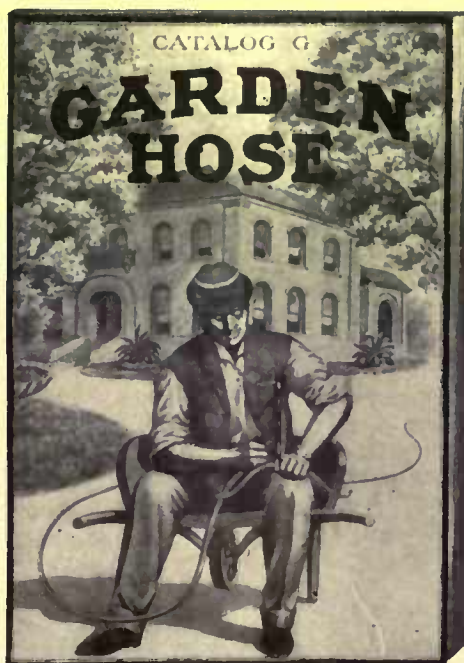
THE FIRE THAT WARMS MEN'S SOULS

MY celebrated Old Fashioned fireplaces are scientifically shaped and proportioned to absolutely guarantee a maximum heat without smoking. The forms are of asbestite slabs easily erected in new or old chimneys. Under no circumstances build without them if you truly appreciate a fire that warms men's souls. All smoky fireplaces cured. Write for sizes and prices.

My Illustrated Volume, "Rumford Fireplaces and How They Are Made," \$2.00

G. CURTIS GILLESPIE, M. E., Architect
FIREPLACE EXPERT

132 Nassau Street New York City



ST. LOUIS, MO., 218-220 Chestnut Street; PORTLAND, ORE., 40 First Street; BOSTON, MASS., 22 Summer Street; INDIANAPOLIS, IND., 120 So. Meridian Street; LONDON, ENGLAND, 13-15 Southampton Row; SPOKANE, WASH., 153 South Lincoln Street.

"There's a Difference" in Garden Hose

We have been manufacturing it for 65 years.

Our catalog tells the story about our different grades and prices.

New York Belting and Packing Co., Limited

New York, N. Y., 91-93 Chambers Street; Chicago, Ill., 130 W. Lake Street; Philadelphia, Pa., 821-823 Arch Street; Pittsburg, Pa., 420 1st Ave.

A Copy
Awaits
Your
Request.

MURRAY & LANMAN'S Florida Water

"THE UNIVERSAL PERFUME"

Has a marked individuality. quite its own and should not be classed with cheap perfumes which usurp the name but can nowise approach it in quality or permanence. These facts stand after a century's test. For the bath, after shaving, and for general toilet purposes it is the one thing to use, if you are seeking the genuine and the best.



ACCEPT NO SUBSTITUTE!
SOLD BY ALL LEADING DRUGGISTS

Sample mailed on receipt of six cents to defray mailing charges

LANMAN & KEMP, 135 Water Street
New York

GARDEN PEDESTALS

We have a select number of English Pedestals and Sun Dials. We also have a beautiful assortment of VASES, FONTS, BENCHES, BALUSTRADES and all other ornamental stone features for the house and garden. Send 10c. for booklet

Francis Howard

5 West 28th St., New York City

English Pedestals from \$25 up



The GALLOWAY COLLECTION has been greatly increased for the season of 1911. Send for New Catalogue showing new designs executed in strong, durable TERRA COTTA.

GALLOWAY TERRA COTTA CO
3214 WALNUT ST. PHILADELPHIA

Garden Suggestions

(Continued from page 45)

the growing plants. If the water has to be carried any distance from the faucets, it will be both cheaper and better to use iron pipe (the same size as the faucet) to carry it where it is needed, using only a short length of hose to distribute with. The pipe is simply laid along the surface of the ground or sunk a few inches under walks or roads. Second-hand three-quarter inch iron pipe can be bought for two or three cents per foot, and anyone can put it together with a couple of pipe wrenches. Good hose costs from fifteen to twenty cents a foot. The pipe should be connected to the faucet by a short piece of hose, which can be quickly uncoupled and the lengths screwed and stored under cover in winter.

Where the source of supply is a well or spring, the problem is not such a simple one. A good hand pump—if a good hand pumper is to be had with it—will throw a large enough stream for properly watering the average home garden or grounds, but it means double work and tedious work. Where the water may, whether by gravity or force, be given an elevation of several feet above the grounds, a tank of some sort will enable the storing of enough water for irrigation purposes on a small scale. A good wooden, stone or metal tank can be had for \$25 to \$40; but it is by no means necessary to go to this expense if one cannot afford it. Good tight pork or pickle barrels can be had for about thirty-five cents each, or empty liquor barrels for a dollar to a dollar and a half. A number of such barrels—up to 12 or 18 of a large amount of water is necessary—can easily be connected together near the bottoms with three-quarter inch iron or lead pipe. If using the iron pipe, "luck nuts" will be necessary to get good tight joints; if lead, fit the connecting pieces in as tightly as possible and protruding about half an inch inside each barrel; then with a cone shaped piece of wood ram the ends out and hammer them down flat. In this way, for a few dollars and a few hours' work, one may have a practical tank of a very considerable capacity. If a barn or shed is available, the barrels can easily be placed in a loft or on a scaffold out of the way and out of sight. Such a contrivance will pay for itself in one season, even on a small place.

Those not familiar with watering in the garden on a large scale are apt to make the mistake of applying a "shower" each day, while the proper way is to give a thorough soaking, in which case once a week, even in very dry weather, will work wonders. The water is best applied on a cloudy day, or late in the afternoon, so that there will be as little loss as possible from surface evaporation. Where water can be supplied only in small quantities, do not sprinkle it over the surface; with a round pointed stick an inch or so in diameter, make a hole near each plant several inches deep. By pouring even a tea-

Is it here



THAT information you've been looking for in regard to some particular phase of building? Probably it has appeared in **HOUSE & GARDEN**—try this index. Copies of these back issues will be mailed at 25 cents each, or if you need six, send us a dollar, and they will be sent at once.

- | | |
|---|--|
| Architect's Fee—Feb., '10 | German Country Houses—Jan., '11 |
| Architectural Drawings—Jan., '11 | Glass, Leaded—Sept., '10 |
| Architecture, Chicago Type—Oct., '10 | Greenhouses—Nov., '09; Aug., '10; Sept., '10; Nov., '10 |
| Architecture, Colonial—Dec., '09 | Hardware—Jan., '11 |
| Architecture, Dutch Colonial—Feb., '10 | Heat, Regulating the—Jan., '10 |
| Architecture, English Plaster—Mar., '10 | Heating—Nov., '09 |
| Architecture, Half-timber—Jan., '10 | Hedge—Apr., '10 |
| Architecture, Italian—May, '10 | Kitchens—Jan., '11 |
| Bathroom Problem—Jan., '11 | Latticework—Aug., '10 |
| Bay Windows—Feb., '10 | Lawn—Apr., '10; Sept., '09 |
| Bedrooms—Feb., '10 | Lighting—May, '10; Dec., '10 |
| Bookcases—Feb., '10 | Lighting Fixtures—Jan., '11 |
| Building Materials—Jan., '10 | Mantels—Oct., '09 |
| Built-in Conveniences—Nov., '09 | Mirrors—Dec., '09; Mar., '10 |
| Bungalow Colony—Nov., '10 | Ornaments—Feb., '10 |
| Bungalows—June, '10; July, '09 | Outbuildings—Jan., '10 |
| Camps—July, '09, Sept., '10 | Picture Hanging—Feb., '10 |
| Cellar—Jan., '10 | Pillows—Nov., '10 |
| Chimneys—Nov., '09 | Plumbing—Sept., '10 |
| China Cupboards, Built-in—Mar., '10 | Portières—Oct., '09 |
| Colonial Detail—Jan., '11 | Porch—Apr., '10 |
| Contracts—Apr., '10; Oct., '10 | Porch (and terrace)—Jan., '10 |
| Decoration, Indian Art—Oct., '10 | Porch, Enclosed—Nov., '09; Dec., '10 |
| Decoration, Plaster Casts—Dec., '10 | Porch, Sleeping—Jan., '10 |
| English Country Houses—Jan., '11 | Porch Pillows—July, '10 |
| Entrances, Doorway—Jan., '10 | Remodeling—Nov., '09; Feb., '10; Mar., '10; Apr., '10; May, '10; July, '10; Nov., '10; Dec., '10 |
| Entrances, Garden—Mar., '10 | Remodeling Farmhouses—June, '10 |
| Entrances, Service—Aug., '10 | Road Making—July, '10 |
| Extras—Mar., '10 | Roof—Jan., '10 |
| Farmhouse, Reclaiming the—June, '10; July, '10; Dec., '10 | Rugs—July, Oct., '09 |
| Fireplaces—Jan., '10 | Rugs, Domestic—Oct., '10 |
| Fireproof House, The—Jan., '11 | Rugs, Oriental—Dec., '09 |
| Footstools—Dec., '10 | Shrub Planting—Oct., '09; Apr., '10 |
| Floor Coverings—May, '10 | Shutters, Outside—Jan., '10 |
| Floors—Oct., '09 | Site, Choosing a—Jan., '10 |
| Furnishings, Period—Oct., '10; Nov., '10; Dec., '10 | Stairways—Nov., '09; Dec., '10 |
| Furniture—July, '09; Oct., '10; Nov., '09 | Stonework—Jan., '11 |
| Furniture, Antique—Aug., '09 | Summer Home—July, '09; Oct., '09; Nov., '09; Dec., '09; Jan., '10; June, '10; Sept., '10 |
| Furniture, Garden—Apr., '10 | Summer Home Furnishing—June, '10 |
| Furniture, Summer—May, '10 | Tree Planting—Oct., '09; Mar., '10; Aug., '10 |
| Garage—Mar., '10 | Vines—Apr., '10 |
| Garden Furniture—July, '09 | Wainscoting—Mar., '10 |
| Gardening, Japanese—Sept., '09; Jan., '10 | Wall Coverings—Sept., '09; Dec., '09 |
| Gardens, City—July, '09; Nov., '10 | Wall Fountains—July, '10 |
| Gardens, Formal or Informal—Dec., '09 | Walls—Aug., '10 |
| Gardens, Rock—May, '10 | Water Supply—Jan., '10; May, '10 |
| Gardens, Water—July, '10 | Window Shades—Nov., '10 |
| Gateways, Colonial—Feb., '10 | Windows—Jan., '10 |
| | Windows, Dormer—Oct., '09 |
| | Workshop—Dec., '10 |

Address House & Garden Librarian

449 FOURTH AVE. NEW YORK, N. Y.

cup full of water into this, and covering earth over the hole, which can be done rapidly with the foot, a crop will be helped along wonderfully.

In connection with the question of applying water artificially, the practice of surface cultivation to reserve moisture already in the soil should not be lost sight of. After irrigating, or after every shower, go over the flower-beds or garden with hoe or wheel-hoe and loosen the surface.

ABOUT THE GROUNDS

In keeping up the general appearance of the place nothing is more important than to keep the lawn from getting rusty and brown in spots. Such a watering system as suggested above will go a long way toward keeping the lawn even and green, but beside water it must have food. A top dressing of nitrate of soda about this time—if possible applied just before or just after a rain—will make a very marked difference in the appearance of things. Better than the nitrate alone, however, will be an application of nitrate bone (or acid phosphate if the odor of bone is objectionable) and muriate of potash, in the proportion three parts soda, two bone and one potash. Sown broadcast in the ratio of about three hundred pounds to the acre, this will induce a strong and continued growth. Another practice in keeping the lawn in first class condition that in this country is too little known, is that of rolling. English lawns are famous the world over, and their perfection, while due, of course, to a favorable climate, owes much nevertheless to frequent and heavy rolling.

IN THE FLOWER GARDEN

There is one error that most non-professional gardeners make with many of the annuals sown from seed. They sow them carefully, tend them faithfully, and guard them with the greatest diligence from any stray dog or other intruder which might perchance break one off. As a matter of fact, such a breaking, or rather cutting back, is just what they need. Otherwise, almost all the strength is thrown into the first main stalk which produces one large flower or cluster of flowers, and thereafter is practically worthless. If carefully cut back in time—when six inches to a foot high, according to variety—these plants would have thrown out strong flowering side shoots and remained in full vigor much longer than when growing up to a single main stem. This cutting back does for the plant above ground what transplanting does for the root system.

Top dressing or liquid manuring of the flower-beds to maintain good growth throughout the season is another good practice seldom resorted to. The average home gardener gives his flowers one big gorge in the spring—if indeed he does not neglect to give them anything—and never thinks of their requiring anything else to eat during the remainder of the year. For this mid-summer manuring, whether used

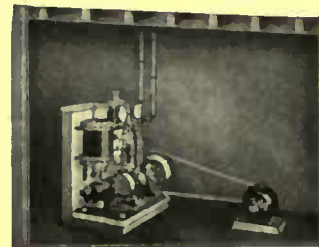


BRUNSWICK

MECHANICAL REFRIGERATION FOR YOUR HOME

If the idea interests you, why not write and find out more about it? We only ask for an opportunity to tell you about our system as applied to your own particular requirements. The testimony of our users is ample proof of the success of our system. List of installations will be sent on request with complete literature. Just a postal—today—addressed to

Brunswick Refrigerating Co.
New Brunswick, N. J.



IRON AND WIRE FENCES

Fences of all descriptions for City and Suburban Homes. Write today for our Loose Leaf Catalog, stating briefly your requirements.

Fence Department

AMERICAN WIRE FORM CO.

100 Church Street

NEW YORK CITY

EVERGREENS

Nursery grown, suitable for all purposes. \$4.50 and up per thousand. We have 50 millions. Our low prices will astonish you. Also Hardy Forest trees, Shade, Ornamental and Fruit trees, Shrubs, Vines, etc. Our beautiful Catalog is crowded with valuable information. This and 50 Great Bargain Sheet are Free. Send for them today.

D. HILL NURSERY CO., Box 301, Dundee, Ill.
Evergreen Specialists



WHEN IN BOSTON STAY AT THE COPLEY SQUARE HOTEL

HUNTINGTON AVE., EXETER AND BLADGEN STS.

A high-class, modern house, intelligent service, moderate prices, pleasant rooms, superior cuisine. Long distance telephone in every room.

Ladies traveling alone are assured of courteous attention.

AMOS H. WHIPPLE, PROPRIETOR.

TRADE MARK TRIUMPH LAWN CARTS

The growing grass season is at hand and the lawn mowers are working. Grass should not be left to die, but should immediately be taken away.

The Triumph Lawn Cart with its wide tires to protect the lawn is an indispensable aid at this time and saves the lawn, as well as the gardener's or your own time.

Send today for our illustrated literature. It's free.

Triumph Carts are made in a variety of styles and sizes for every purpose. Reliable dealers handle the "Triumph," or from us direct. We prepay freight east of the Mississippi River.

No. 8 Lawn Carts

Removable rack of hardwood strips, 38 x 53 x 8 inches.
Box 27 x 42 x 10 1/2 inches.
Side wheels 30 in., 1/4 in. spokes, 3 in. rims.
Built for lawn and garden use.
Capacity: 1/4 ton. Shipping weight, 150 pounds.

PRICE - \$25.00

This is by far the finest cart of its kind for the suburban estate. Note the wide tired wheels. Rack can be removed in thirty seconds. Large estates buy these carts in quantities.

SWARTWOUT MFG. CO.

203 Meadow St.

Clinton, N. Y.



Triumph Carts are finished in Dark Green Body with Orange Striping, Red Gears, Hardwood Rack and Handles, natural finish.

"CRAFTSMAN"



Designed by
GUSTAV STICKLEY

Send 6 cents for a copy of "24 CRAFTSMAN HOUSES" showing exterior and floor plans of 24 houses that cost from \$500 up to build. To interest you in our magazine, "THE CRAFTSMAN," and in Craft articles, we will also send you a beautifully printed 32-page booklet entitled "The Craftsman House."

If you are interested in all, both of these books will be very useful to you.

"THE CRAFTSMAN IDEA" means *real homes*, not mere houses; it shows you how to save money on useless partitions—how to avoid over-decoration, how to get wide sweeps of space (even in a small house), restful tones that match and blend—and enables anyone to always have a beautiful and artistic home.

"THE CRAFTSMAN MAGAZINE" treats on building, furnishing and beautifying homes—on art—embroidery—cabinet work—and kindred topics.

"CRAFTSMAN HOMES," by Gustav Stickley, 205 pages, beautifully bound and printed, treats on home building, home making, home furnishings in full.

"THE CRAFTSMAN" - - - - \$3 All for
"CRAFTSMAN HOMES" - - - - \$2 } **\$3.75**

Your own selection of 118 House Plans

Edgar E. Phillips, Manager The Craftsman, Room 230, 41 W. 34th St., N.Y.

PROTECT Your floors and floor coverings from injury. Also beautify your furniture by using Glass Onward Sliding Furniture and Piano Shoes in place of casters. Made in 110 styles and sizes. If your dealer will not supply you Write us—**Onward Mfg. Co.** Menasha, Wisconsin, U. S. A., Canadian Factory, Berlin, Ont.



Beautify Lawn or Terrace by sowing the Wizard **KALAKA** Lawn producer

Comes up anywhere, all it needs is soil and moisture. Seed and fertilizer scientifically mixed to produce marvelous results. Hundreds praise its great efficiency. Cheaper, goes further than common seed. Ask for FREE Booklet, "How to Make a Lawn."

The Kalaka Company 816 Exchange Ave. Chicago, Ill.
Union Stock Yards.



Insure Against Failure

Avoid disappointment in your fall planting this year by selecting and ordering early. For the convenience of our customers, we issue our

Fall Catalogue

early. It contains descriptions, pictures and prices of all standard and new varieties of bulbs:

Tulips Crocuses
Hyacinths Narcissus

Send for a copy today, which is yours for the asking

Bridgeman's Seed Warehouse

Founded 1824

RICKARDS' BROS., Proprietors

37 East 19th Street New York

as a top dressing or for liquid manure, nothing is better than well rotted cow manure. There is now on the market a brand of shredded manure which ought to make a good substitute where the real article cannot be obtained readily.

Do not neglect to make notes of the effects in the flower gardening during this month—where there is too little bloom, where colors clash, etc., etc. Remember that while the time to make changes in the garden is during spring or fall, the time to determine what changes should be made is right now.

IN THE VEGETABLE GARDEN

Of course, what has been said about supplying water and surface cultivation applies here as well as to flowerbeds and grounds.

The last sowings of some of the fall vegetables should be made—remembering always to firm the seed thoroughly if the soil is dry. Limas, carrots, celery, corn, cucumbers, even early potatoes, pole beans, beets, swiss chard, cabbage and cauliflower may still be planted and brought to maturity if they are put in promptly. Succession plantings of bush beans, cress, lettuce, turnip, radish, endive, and kohlrabi should be made.

Now is the time, also, to set out your pot-layered strawberries. Take pains in doing this work, and if very dry, put water in each hole before setting out, or shade from the sun from ten to four o'clock for a couple of days with newspaper.

The weeds, too, need careful watching in this dry weather, especially purslane, which begins to ripen seed almost before you know it has begun to grow. Remove it from the garden and burn.

Remember that as you work now, even if it is so hot that you can hardly touch your hand to the soil, depends the success of almost three months of your garden, to say nothing of the surplus you should have to store away for the winter months.



Building a House With a Sleeping Porch

(Continued from page 34)

The general construction of the sleeping-porch is shown in the diagram on page 62 and needs very little further elucidation. For the occasional storms that beat in, also for purposes of cleaning, it will be found convenient to install a gutter at the rail with drips to the outside. The latter in all cases should be solid. Should the style of architecture require the use of balusters or of other details depending upon the play of light and shade, then removable flush panels should be fitted to the back of the rail to satisfy the requirements of the design and to add to the comfort of the occupant. Porch posts and the jambs of the openings should be reduced to their simplest terms

(Continued on page 62)

THE HOUSE BEAUTIFUL



A "House Beautiful" illustration greatly reduced

"THE HOUSE BEAUTIFUL" is an illustrated monthly magazine, which gives you the ideas of experts on every feature of making the home, its appointments and surroundings beautiful.

It is invaluable for either mansion or cottage. It shows how taste will go farther than money. Its teachings have saved costly furnishings from being vulgar—on the other hand, thousands of inexpensive houses are exquisite examples of refined taste, as a result of its advice. It presents this information interestingly and in a plain, practical way. Everything is illustrated frequently in sepia and colors.

"The House Beautiful" is a magazine which no woman interested in the beauty of her home can afford to be without. It is full of suggestions for house building, house decorating and furnishing, and is equally valuable for people of large or small income.

ELLEN M. HENROTIN,
Ex. Pres. Nat. Federation of Women's Clubs.

SPECIAL TRIAL OFFER

WITH

PORTFOLIO OF COLOR PLATES

Our readers all say the magazine is worth more than the subscription price, \$3.00.

But to have you test its value, we will mail you FREE, "The House Beautiful" Portfolio of Interior Decoration and Furnishing with a five months' trial subscription. The Portfolio is a collection of color plates and others, picturing and describing rooms in which good taste rather than lavish outlay has produced charming effects.

Fill in the attached coupon—wrap a one dollar bill around it—mail to-day and the Portfolio will reach you by return post. "The House Beautiful" will then continue regularly for FIVE months.

THE HOUSE BEAUTIFUL, Room 1713, 315 4th Ave. N. Y.

You may send me your Portfolio of Notable Examples of Inexpensive Home Decoration and Furnishing FREE. I enclose herewith \$1.00 for a special rate five-month trial subscription to THE HOUSE BEAUTIFUL.

NAME

ADDRESS

TOWN OR CITY STATE

STEVENS-DURYEA

THE IDEAL MOTOR CAR OF THREE-POINT SUPPORT

Send for Catalogue

Stevens-Duryea Co., Chicopee Falls, Mass.

Can Be Used In

Aphine HOUSE and GARDEN

The Insecticide that kills plant Lice of every species

For flowers and vegetables. Used as a spray. Get it from your dealer or write for particulars to

Aphine Manufacturing Co., Madison, N.J.



HAVE YOU DECIDED TO GO ABROAD AT OUR EXPENSE?

THERE is still time if you have the desire. Last month in this magazine we announced our extraordinary plan for sending some of our subscribers and readers abroad and to interesting parts of our own country, and within a few days after publication fifty people wrote us that they were going to accept our invitation.

A physician and his wife, in California, wrote to us that they would go abroad on one of the foreign tours, and that the task of getting the necessary subscriptions would be an easy one.

A minister of a large church in Illinois expects also to go on this tour, through the efforts of a committee which his wife has organized. Among the church members and various friends it is expected that 100 subscriptions can be readily secured, as each member of the committee can easily get a few subscriptions, which in the aggregate would make up the required number.

Other people are adopting our suggestion of mailing the page announcement of the tours which we send them, to their friends, requesting subscriptions, and in other cases we are sending sample copies of *TRAVEL* and *HOUSE & GARDEN* direct to the friends of our subscriber, who was planning to follow these people up personally. It is expected that a large number of our subscribers will avail themselves of this unprecedented opportunity.

WILL YOU ACCEPT OUR INVITATION

to go on a trip abroad, all expenses paid by us; or to Yellowstone Park; or to Bermuda; or down the St. Lawrence, visiting Montreal and Quebec; or up to the Maritime Provinces? All we ask you to do is to merely co-operate with us in a little summer plan we have devised to extend the subscription lists of *TRAVEL* and *HOUSE & GARDEN*. The whole thing may mean but a few hours' work to you. If you have a large circle of friends you can easily accomplish it by mail. The following are the trips offered and the number of subscriptions you have only to send us to secure them.

A four weeks' trip abroad, visiting England and France, sailing Aug. 12th and Sept. 9th.....	100 subscriptions
A three weeks' trip abroad, visiting England, returning via Montreal, Canada, sailing July 29th.....	75 subscriptions
An eleven day trip to Yellowstone Park from Chicago or from Portland, Ore., with a week's tour of the Park.....	75 subscriptions
A ten days' trip to Montreal and down the St. Lawrence to Quebec, with a trip up the Saguenay River, returning to New York either through the White Mountains or by way of Lake Champlain, Lake George and the Ausable Chasm.....	50 subscriptions
A ten days' automobile tour of the White Mountains....	50 subscriptions
A ten days' trip to the Maritime Provinces by Boat from Boston, visiting New Brunswick, Nova Scotia, Prince Edward Island and the land of Evangeline.....	50 subscriptions
An eleven day trip to Bermuda; four days at sea and seven on the island.....	35 subscriptions
A trip to Boston from New York by boat, with two days at the hotel in Boston, during which time a trip will be taken, visiting the principal points of interest in and around Boston.....	15 subscriptions

HOW WE HELP YOU

The simplest way to secure any of the above trips is as follows: We have had printed some extra copies of a page somewhat similar to this, describing the plan of this offer and the magazines, a supply of which we shall be happy to send you on request. When you receive these write brief notes to your friends enclosing one of these pages, which will explain itself, and they will understand that by subscribing to *TRAVEL* or *HOUSE & GARDEN*, whichever they prefer—magazines that will prove of untold interest and inspiration to them—they enable you to get a delightful vacation at our expense. They will be glad to secure for you one of these tours, since their subscriptions to the magazines will not cost them any more than by the publishers in the usual way—consequently you do not place yourself under obligation to them. We shall be glad also to mail sample copies of *HOUSE & GARDEN* or *TRAVEL* to your friends who are not acquainted with them.

WHY NOT SEND ONE OF YOUR FRIENDS ABROAD?

Perhaps you have a friend whom you would like to surprise, maybe the pastor of your church (here the task would be a simple one, as many of the members would readily subscribe and work with you), or your children's school teacher, or a business associate, or perhaps a relative. Get your mutual friends to work with you.

These splendid tours have been arranged for with one of the leading American tourist agencies. They cover every expense, including transportation, hotel and the services of a guide. The accommodations everywhere are first-class. Detailed information will gladly be sent you about any of the trips mentioned above, such as dates of departure, itineraries, etc. Write us immediately for the reprints of this page (as many as you require) and for any additional specific information you wish about this offer or the tours. Your letter will have prompt and individual attention.



Travel

McBride, Winston & Co., 449 Fourth Ave., New York
PUBLISHERS



House & Garden



BENCHES

of various lengths for the garden, to fill in bare spaces or set at end of walk.

Catalogue showing thirty different designs on request.

TOGNARELLI & VOIGT COMPANY

2302 Chestnut Street

Philadelphia, Pa.

160 Pictures for 25 Cents

Copr. Life Pub. Co.



A MISS IS WORSER THAN A MILE

Make Your Home More Attractive

Send twenty-five cents for LIFE'S handsome 130-page catalogue showing miniature reproductions of pictures for framing, ranging in price from twenty-five cents up to \$2.00. If, upon examination, you think the catalogue is not worth price, we will return the money. Send in stamps or cash to

Life,
14 West 31st St., New York

DON'T COOK THE COOK USE

"ECONOMY GAS"

For Cooking, Water Heating, and Laundry work, also for Lighting.

"It makes the house a home"
Send stamp today for "Economy Way"

Economy Gas Machine Co.
ROCHESTER, N. Y.

"Economy" Gas is automatic, Sanitary and Not Poisonous

EVERYTHING for the HOME GROUNDS

Ornamental, deciduous, shade and weeping trees, Flowering shrubs, Barberry, Privet, Evergreens, Conifers, Hardy trailing vines, Climbers, Fruit trees, Berry bushes, Hardy garden plants, etc. The finest selection for lawn and garden planting in America. More than 600 acres of choicest nursery produce.

We will make a planting plan of your place, selecting trees, shrubs, etc., suitable to soil and situation, and give you the exact cost of planting and proper time to plant. Send for Catalog D.

The Stephen Hoyt's Sons Company
Established 1848 New Canaan, Conn. Incorporated 1903



THREAD
AND
THRUM
RUGS

THREAD and THRUM RUGS

are made seamless,
of pure wool or
camel's hair, in any
width up to

16 FEET

and in any length, color, or combination of colors. 65 regular shades—any other shading made to match. Send for color card.

"You choose the color, we'll make the rug."
Arnold, Constable & Co., Selling Agents, New York
Thread & Thrum Work Shop, Auburn, N.Y.

The New Mount Kineo House

Moosehead Lake, Maine



THE Mount Kineo House, famous for over half a century, has been reconstructed and sumptuously refurbished by its new owners, the Maine Central Railroad, and is now under the management of the Ricker Hotel Company of Poland Springs.

With its picturesque environment, Kineo offers an unrivalled combination—the luxury of a magnificent new hotel, gay with social life and the invigorating atmosphere of woods and waters.

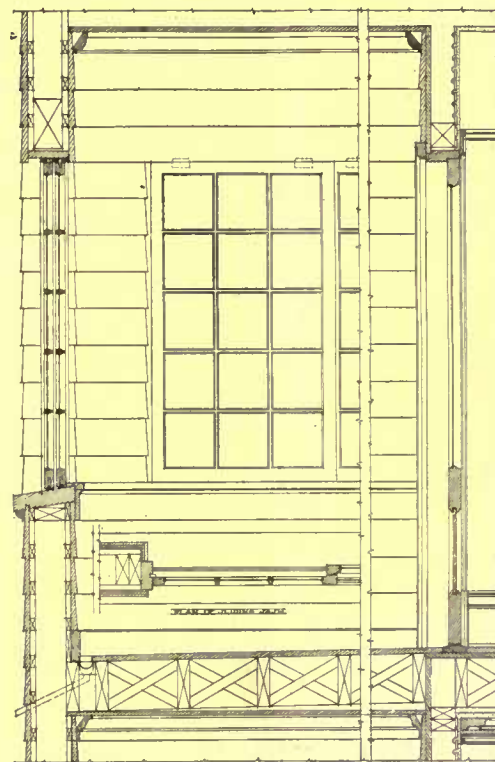
With its increased facilities the New Mount Kineo House can accommodate over 500 guests. Early reservation, however, secures the choicest rooms and cottages. Write us for rates and reservations, and for our superbly illustrated book, full of interesting facts and descriptions.

RICKER HOTEL COMPANY, 1180 Broadway, New York 153 Franklin Street, Boston 1711 Chestnut Street, Philadelphia

In writing to advertisers please mention HOUSE AND GARDEN.

(Continued from page 60)

to render as easy as possible the fitting of sash and screens. The floors need have but a moderate slope, say one inch in eight feet. The most serviceable floor is canvas duck over spruce flooring; the canvas should be laid in paint and given two coats of lead and oil and one coat of spar varnish; or, if this should prove too expensive, the canvas might be omitted and the joints of the spruce flooring painted with lead and oil as laid. This gives a satisfactory floor for all ordinary purposes. Doors to the sleeping-rooms are best single Dutch doors at least three feet eight inches wide, to permit the beds (single beds three feet wide) to be rolled in and out. The thresholds at these doors should be rounded. If electricity is at hand, there should be at least one ceiling light, one



Detail section through sleeping-porch, showing sliding sash arrangement and drainage of floor

bracket near the bed with chain pull socket and long chain, and one base outlet for reading lamp or electric warming pad.

The question of design has been placed last in the consideration of the essentials of the sleeping-porch, but obviously is not the least important, for unless the porch can be made to appear as part of the general scheme, its usefulness will in many cases not always outweigh the sacrifice in appearance. The one important consideration is that it should not have the appearance of an addition; that is easily avoided by giving the sleeping-porch its proper place in the general scheme as soon as the first rough sketch is attempted. Thereafter it is to be treated as any other integral part of the structure. Any at-

(Continued on page 64)

DISTINCTIVE HOMES OF MODERATE COST



A Book for House Builders and Home Makers
EDITED BY HENRY H. SAYLOR

This book has been published in response to an ever-increasing demand for a volume of pictures, plans and descriptions of the most charming homes in this country—not the great estates and show places, but the sort of places that most of us can look forward to building, ranging in cost from \$3,000 to \$20,000.

The carefully selected contents includes country homes, seashore cottages, alluring bungalows, inexpensively remodeled farmhouses, etc. All the desirable architectural styles are represented. Chapters written by authorities cover all sides of the fascinating problem of house-building, interior decoration and furnishing. The relations between the home-builder and his architect, the matter of plans, specifications, contracts, the puzzling problem of extras and how to avoid them—all these subjects are clarified in a most comprehensive and interesting way.

Distinctive Homes of Moderate Cost is the most complete and authoritative volume on the subject yet published. It is a sumptuous book, size 10x12 3/4 inches, superbly printed on plate paper, tastefully bound. Price \$2.00 net. By mail, postage, 30 cents.

McBride, Winston & Co., 449 4th Ave., N. Y.



The Original

BAY STATE

Brick and Cement Coating

protects concrete or stucco walls, floors and ceilings against damage from moisture and does not destroy the pleasing texture of concrete or stucco. It has been endorsed by the National Board of Fire Underwriters as a fire retarder; has been applied with great success to the exteriors and interiors of residences, hotels, factories and mills; when applied on ceilings it does not drop off, thus preventing damage to delicate machinery. It is not affected by acids or smoke.

For Floors

It prevents floors from dusting and sanding and is admirable for hospitals and similar institutions. Will stand wear and washing. Write us for particulars about its application. We can give you the names of some of the best residences and best textile and other mills where it has been used successfully under most adverse conditions.

Address for descriptive booklet, Dept. 13, mentioning this medium.

WADSWORTH, HOWLAND & CO., Inc.

Paint and Varnish Makers and Lead Corrodors

82-84 WASHINGTON ST.

BOSTON, MASS.

Expert Assistance in the Selection of a Country Home or Home-site

COUNTRY HOUSE NUMBER
Number 1179 Price Twenty-five Cents

TOWN & COUNTRY

PUBLISHED BY THE STUYVESANT COMPANY
PARIS NEW YORK LONDON
60 RUE CHATELAIN 345 FIFTH AVENUE 11 CHARING CROSS ROAD

TOWN & COUNTRY, the illustrated weekly paper of the delights and pleasures of the Country, has realized the difficulty thousands of people have in locating a home or home-site to meet with their requirements. With the desire to make this paper better known to the real estate buying public, real estate agents and owners, the publishers have incurred a large expense to render to the intelligent homeseeker a kind of assistance never before offered. They have had Mr. John H. Livingston, Jr., make a personal examination and investigation of New York's suburbs, especially the developments (there are 126 of them to our knowledge). The

Town & Country Homeland Bureau

in charge of Mr. Livingston has on file at our office complete data, including photos, time tables, and in addition the opinion of an expert. Our material is divided especially in reference to suburban New York, Westchester County, New Jersey, Connecticut, and Long Island. If you are seeking a home or home-site in any of these localities, and want the advice of our paper, the services of the Town & Country Homeland Bureau are at your disposal on the purchase of a copy of Town & Country, which is on sale at most newsstands, or a copy of our Ideal Homes issue, a special number, will be sent you on receipt of 25 cents in stamps; each copy contains a

REAL ESTATE INFORMATION BLANK

for you to fill out. This Bureau does not sell or show properties, merely gives opinions and facts.

John H. Livingston, Jr.

Town & Country Homeland Bureau

389 Fifth Avenue, Cor. 36th Street

Telephone 3627-28-29 Madison Square

In the JULY SCRIBNER

General Frederick Funston

will continue the story of his

Philippine Experiences

with an account of the fighting before Caloocan and Its Trenches. It has all of the qualities of vivid romance

The eminent historian, *James Ford Rhodes*, contributes an article about
The Great Railroad Riots of 1877

Recollections, Grave and Gay. In her final chapters *Mrs. Burton Harrison* recalls the charming social life of New York in the seventies

Mary R. S. Andrews, author of "The Perfect Tribute," will be represented by a college story

The Courage of the Commonplace

that will stir the blood of both young and old

The Charm of Rivers

By *Walter Prichard Eaton*
Illustrated

Love and Rheumatism

By *Carter Goodloe*

Another remarkable story

The Wine of Violence

By *Katharine Fullerton Gerould*
Author of "Vain Oblations"

F. Hopkinson Smith's

beautiful story of the old South

Kennedy Square

THREE DOLLARS
A YEAR

CHARLES SCRIBNER'S SONS

TWENTY-FIVE CENTS
A NUMBER

PENNSYLVANIA

Quality LAWN MOWERS

THE ONLY MAKE WITH CRUCIBLE TOOL-STEEL
BLADES THROUGHOUT



For durable painting of all kinds use National
Lead Company's Pure White Lead (Dutch Boy
Painter trade mark). Ask for Helps No. 91. Sent
FREE on request.

NATIONAL LEAD COMPANY, 111 Broadway, New York

"Willowcraft" Furniture

is a distinct type of willow furniture at once clever and original in design and workmanship. It is not a copy; it is a *precedent*. Consequently it is being extensively imitated as all good things are. Naturally the imitations are cheap, unsatisfactory productions, built for the moment. "Willowcraft" is built to satisfy the most artistic tastes and give a lifetime of service.
Ask your dealer for genuine "Willowcraft." Look for the "Willowcraft" stamp beneath each piece. Illustrated catalogue, dealers and price list free.

THE WILLOWCRAFT SHOPS
Box C - - North Cambridge, Mass.



In writing to advertisers please mention HOUSE AND GARDEN.

(Continued from page 62)

tempt to give the sleeping-porch an expression of its own in the general composition by a forced change in the roofing scheme, would only lead to difficulties in the way of lack of unity, particularly in small houses. Considering the sleeping-porch merely as an outdoor bedroom, living-room or playroom, which assumption is perfectly justifiable by reason of the uses to which it is put, then the porch will sufficiently reveal its presence by the character and treatment of its openings.

As the love of outdoor life grows throughout the country, so will the demand for the sleeping-porch increase—at least so far as the country or suburban house is concerned. The next step will be to extend its usefulness to the city house, especially to that type tenanted by those who must endure the heat of summer save for a respite for a fortnight at most, and to whom outdoor sleeping, especially during the heated term, would prove of incalculable benefit. We mean that type of house built row after row in most of our cities and which has been greatly improved, at least as far as its livableness is concerned, during the past quarter century, by the addition of the front porch. Of course the handling of the sleeping-porch in these houses of limited dimensions will prove difficult enough, but that will make the problem all the more interesting to the architectural profession.



Achieving Character in Remodeling

(Continued from page 36)

production of a molding shop. The choice of some particular kind of pictorial form for each room is a happy solution of the difficulty. When pictures are set in rather than hung, they become really a part of the decoration of the room.

Japanese prints lend themselves to this use most delightfully. Photographs of foreign lands, places, or of great pictures or statues or works of art we love and like to have where we can see them and live with them can be made a most suggestive decoration for a library, a "den" or small writing-room.

One of the greatest trials of the house furnisher is the straight stair, springing directly from the front door. The first thought of a convenient way to get rid of this is by turning the stair—thus pushing back the lower steps and getting rid of the long unbroken line. But many times this cannot be done on account of the expense involved in an alteration of so fundamental a kind. If the hall is of sufficient width to admit of it, the widening of the three or four lower threads, with the consequent curving of the baluster, will accomplish much and costs comparatively little.

Perhaps the most difficult task set the redecorator is the use of old furniture.

(Continued on page 66)

Many times we can redecorate but not re-furnish. Good, substantial pieces cannot be sacrificed, and the decorator faces the problem of making his rooms fit the furniture rather than the furniture the rooms. If this happens to be of good design and harmonious, even if not all of the same character, it will not be so difficult; but, again, it may be too ornate or of widely differing woods or designs.

The use of paint on old furniture has not yet been given a general trial, but it accomplishes surprising results. Much of the over-ornate furniture of twenty years ago has for its most objectionable feature the ornamentation of sawed-out figures glued on. This can quite easily be removed and it often leaves a plain piece of furniture with fairly good lines, which may be painted and left plain, or, with a quaint decoration of flowers and fruits stenciled on it, makes charming furniture for bedrooms, where light colors are desired. Or if the furniture be of walnut or oak or other handsome wood, removal of varnish and the application of a good wax finish makes a different looking article of the piece once so objectionable or inharmonious.

The daintiness of white furniture is acknowledged by everyone. And what is more appropriate for a young girl's room than furniture of pink or blue or lavender? For a boy's room, paint the furniture black and have plenty of brilliant colors about, and you will have a room full of character and yet pleasing to the eye. One boy's room was made very striking by painting the furniture—in the orange red enamel paint, the color that one sees in Japanese prints, the whole being held down with gray woodwork, lighter gray walls and Russian crash hangings. In this room there was not much honorable furniture—an iron bed, a few chairs, an old study table and a high, small dressing-stand, the chiffonier being built in and consequently of the color of the woodwork. No two pieces in this room were of the same kind or style originally, yet the few cans of paint made them surprisingly homogeneous in effect. While the bright red would be too striking for most tastes, it exactly suited the room of this particular boy.

The only large space of the red was the table top, which was mostly covered with a crash runner and a gray blotter, and racks of books at either end.

With the growth of outdoor life the house becomes not less but more important. The more we live in the open, the more we demand of light and air in our houses. The remodeled house, like the newly built one, has fewer rooms and has them larger, spends more on large windows, well glazed and screened, and less on elaborate woodwork or ornamentation of any kind, and in the made-over house the process of elimination is more important and often more costly as well than the subsequent decoration.

DURABLE AND ARTISTIC ROOFING



Residence of W. T. Phillips, San Mateo, Cal.
Covered with Meurer's Metal Tile

Meurer's Metal, Spanish and Mission Tiles

The Ideal Roof Covering
made in tin, galvanized and copper

MEURER BROTHERS CO.
MANUFACTURERS

575 Flushing Ave. Brooklyn, N. Y.

WORKS, Washington, Penn.

130 East 129th St., New York City

Are You Building?

Then let us send you copy of our new booklet, H G-6, which tells all about the proper method of finishing floors and interior woodwork.

Johnson's Wood Dye

makes inexpensive soft woods just as artistic and beautiful as hard woods. Tell us the kind of woods you will use and we will mail you panels of those woods artistically finished together with our 25c booklet all free and postpaid.



S. C. Johnson & Son, Racine, Wis.
The Wood Finishing Authorities



Garden & Porch Furniture Rose Temples & Arbors

Send for new catalog

NORTH SHORE FERNERIES CO.
Beverly, Mass.



"ST. GEORGE"

A WORD TO THE WISE Buy direct from the Manufacturers.

"SPECIAL" \$5.00 THE "CORONATION" CHAIR

Size of Seat 20 x 20 in., Height of Back 36 in.

(Shipped on receipt of Money Order or N. Y. Draft, F. O. B. New York)

MINNET & CO., MANUFACTURERS OF WILLOW FURNITURE

Lexington Avenue New York, N. Y.

Between 40th and 41st Streets

RICHARD M. ARCHER, Manager

Factory: CARLSTADT, N. J.

Send for Illustrated Catalogue

Let us HELP YOU with your Color Scheme

Whether your house is half-timbered, shingled all over or rough clap-boarded, it should harmonize with its surroundings as well as being artistic in itself. Our miniature stained shingles will enable you to decide, right on the ground, which colors are best.

Dexter Brothers' English Shingle Stains

do more than beautify—they protect, adding years to the life of the wood. And the colors will not fade. The set lies in the use of the best English ground colors mixed in linseed and our own Dexter preservative oils.

Write for booklet and sample miniature shingles TODAY.

Dexter Brothers Co., 115 Broad St., Boston, Mass.
Branches: 1188 Broadway, N. Y., 214 Race St., Philadelphia, Pa.

Makers of Pettifox Cement Coatings

AGENTS: H. M. Hooker Co., Chicago, F. H. McDonald, Grand Rapids, Mich., F. T. Crowe Co., Seattle, Spokane, Tacoma, Wash., and Portland, Ore. Carolina Portland Cement Co., Birmingham and Montgomery, Ala., Jacksonville, Fla., Charleston, S. C., New Orleans, La., F. S. Coombs, Halifax, N. S., E. B. Tetten, Security Bldg., St. Louis, Mo., M. D. Francis, Atlanta, Georgia, Sherman-Kimbel, San Francisco, Cal., AND DEALERS.



Warrington G. Lawrence, Architect, New York.

Be sure the words
Dexter Brothers
English Shingle
Stain
are on every barrel, keg and box.





Hicks Evergreens to Plant Now

Evergreens are a delight all the year. You can plan for them in July, and plant the latter part of that month, August or September. Come to our nursery and select some of the stock. We have been working for many years to prepare a stock of nearly all the species of evergreens hardy in this climate and have many of them in sizes up to 20 and



30 ft. ready for immediate delivery. Is there a disagreeable view you want to screen?

Do it in August with evergreens and it is done for all the year. Do not depend on Lombardy Poplars. We can ship the evergreens from our nursery, or from the collecting fields where we have over 1,000 big White Pine, Red Pine, White Cedar, and Hemlock 10 to 30 ft. high, root-pruned. They are the cheapest because it has cost nothing to grow them. We are offering them at prices close to the cost of handling them to popularize an undeveloped branch of landscape planting. Send for "Evergreens for August and September Planting."

Isaac Hicks & Son

Are there cedars in your vicinity we can move for you?

Westbury, Long Island

The Essentials of the Modern Kitchen.

(Continued from page 39)

galvanized iron, copper, soapstone or enameled porcelain, and provided with an ample draining-board; two being much preferred. If there is a special sink for vegetables required, it should be immediately adjoining the draining-board to insure compactness and convenience as well as economy in plumbing. The draining-board may be of hard wood or of wood covered with copper or zinc. The best are made of enameled ware similar to the sinks. Draining-boards of copper or zinc should be given only a slight slope to prevent the possibility of dishes slipping therefrom.

The refrigerator should be built in or placed against an outside wall in order that the ice can be put in easily from without through either a small opening or window. If it can be avoided, the refrigerator should not be placed immediately in the kitchen, but rather in the entry, pantry or enclosed porch.

The kitchen of the small house which sometimes has no communicating pantry should have built therein dressers of such proportions as will accommodate all the necessary dishes, pots, vessels, bins for flour, sugar, etc., cutlery, and other things essential for obtaining the best results under the circumstances. A dresser of commodious size is always a blessing. The top portion, of plain shelves, should be enclosed either with doors or sliding glass fronts; the lower portion, first lined with zinc and enclosed with solid wooden doors so constructed to fit nearly if not airtight. If an exclusive pot closet is desired, it should be handy to the range and at the same time be under cover for sanitary reasons.

Frequently in a small kitchen a counter or drop leaves against the wall are substituted for a table, but in most kitchens a good-sized substantial table, preferably in the center of the room, is found indispensable. The table should have a smooth top that can be easily kept clean. Although costly, a heavy plate glass fitted perfectly with rounded edges makes a splendid top for the table.

The service part of the house, of which the kitchen is the central room, should fit together just as parts of a machine and form a unit in themselves. The pantries, store rooms, etc., should be placed so as to afford easy access one to the other.

In a house, which has two or more servants, a dining-room or alcove should be provided for their use. This may be a part of the kitchen or immediately adjoining, and merely large enough to comfortably seat the servants around a table.

The cook's pantry should contain cupboards in which are all the necessary paraphernalia for preparing pastries, puddings, etc., such as bins, bakeboards, crockery, pans and supplies, and should be lighted by at least one window.

The butler's pantry, or china-closet as

Until July 25, We will take orders for 125 Varieties
RARE LATE TULIPS
from our Holland Nurseries. Better order all
DUTCH BULBS at same time.
FRANKEN BROS., Deerfield, Illinois

Residences,
Churches,
Schools,
Stores,
Houses,
Etc.



ARTISTIC HOMES

A 1000-Page Plan-Book of
Moderate-Cost Houses Price \$1.
Largest Published - Entirely New Plates

Other Smaller Books are:
We Prepay Postage
\$ 500 to \$1000 Houses - 25c
\$1000 to \$1200 Houses - 25c
\$1200 to \$1500 Houses - 25c
\$1500 to \$2500 Houses - 25c
California Bungalows - 25c
Artistic Churches - 25c
Herbert C. Chivers Co.
1622 Call Bld., San Francisco

LOOK AT THIS PICTURE.



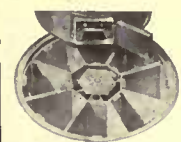
All the drudgery, dust, disorder, inconvenience and labor of removing ashes and garbage is saved by the

SHARP

Rotary Ash Receiving System

Do away with boxes and barrels. All waste material not easily burned is held with the ashes in strong galvanized iron cans contained in a fire-proof vault. Cans revolve easily as filled. Ashes fall naturally away from grates. Saves grate, improves draft and holds accumulation of 6 to 10 weeks. Use one can for garbage.

Holds 6 to 10 weeks' ashes, removal of which is no effort.



Approved by Health Officers, Architects and Heating Contractors. Easy to install even if heater is already in. Better investigate before you complete your building plans. Write for free catalog, and read opinions of others. Dealers and Architects names appreciated.

THE W. M. SHARP CO.
217 PARK AVE.
BINGHAMTON, N. Y.



ALBERT J. CHIVERS, ARCHITECT.

INDIANAPOLIS PEOPLE

are building a lot of good houses of moderate cost. This one is particularly pretty because of its nicely grouped casement windows, which also make it particularly comfortable these warm summer days and nights.

Our famous Adjusters on the sash work easily and securely from *inside* the screen. No flies, *no bother*, just comfort all the time.

Our free little book tells why.

CASEMENT HARDWARE CO.

175 N. STATE STREET : : CHICAGO

it is often called—generally located and affording direct communication between the kitchen and the dining-room—is essentially a serving-room and should contain a sink with draining-boards, cupboards and shelves to accommodate the fine china, glassware and other requisites for the table. With such a plan the door between the pantry and kitchen may be either sliding or double swinging, but between the pantry and the dining-room, a noiseless double-swinging door. A slide, with small shelves or counters on either side, between the kitchen and pantry, for the passing of food and dishes, saves time and steps. It is well to have the communication rather indirect through the pantry to prevent in a measure the passage of odors or a direct view of the kitchen by those entering the dining-room or seated at the table. This can be partly accomplished by not having the communicating doors directly opposite each other.

The outside entrance to the kitchen should be so placed as to facilitate the delivery of provisions, preferably through an entry or an enclosed porch.

The laundry in many houses is combined with the kitchen or immediately adjoining, in which latter case it often serves as an entry and a place to store certain articles, such as brooms, buckets and possibly the refrigerator. The very best plan is to have the laundry in the basement, with separate outside stairs. In such a case, a chute for sending soiled linen, etc., should run from the kitchen or pantry to the laundry.

The kitchen should above all be well ventilated and have plenty of daylight. The necessary fumes and heat arising from the cooking should be taken care of in such a way that none of it is carried to the dining-room or to other parts of the house. This can partly be accomplished by the hood over the range, but plenty of fresh air is required. Generally in country homes, the living-rooms are given the southern exposure, so the kitchen usually faces the north. The best location is either the northern or eastern exposure, as the cooling breezes in the summer generally come from that direction, especially in this part of the country, and combined with the morning sun, make the kitchen cheerful and cool. If possible there should be exposure on at least two sides, opposite, affording cross ventilation as well as an abundance of light. All windows should be well fitted with screens in summer to keep out flies and other insects attracted by the odors of cooking.

The best artificial lighting is obtained by a reflector in the center of the kitchen, possibly with side brackets where necessary, as at the sink or at the range.

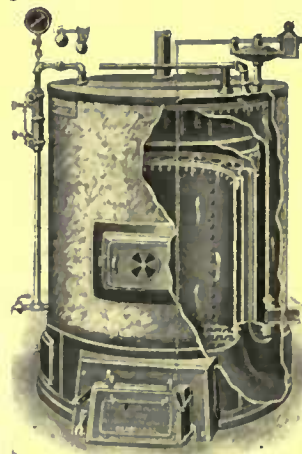
In a large house the service portion may be situated in a separate wing and if so the stairs should be in a small hall, centrally located and near the kitchen, especially the stairs to the cellar. This hall may contain a closet for brooms and a lavatory for the use of the servants. It is well not to have the stairway ascending

Test of Time

DUNNING Boilers are the culmination of half a century's experience in the business, and its claims on superiority are based upon the metal used and

**Its Safety
Its Strength
Its Durability
Its Convenience
Its Economy in Fuel
Its Long Fire Travel
Its Conservative Ratings
Its Superior Workmanship
Its Interior and Exterior Parts and Fixtures**

And that no expense is being spared to make it surpass its past record which has never been equaled.



The Regular Dunning Boiler

The Heart in the Art of House Heating

Has your heating plant proved fully efficient this past winter?

If it has not, would you be interested in the opinions of many other people like yourself who have installed the Dunning System?

Would you not rather take the matter up with us now whilst you remember exactly what you want, than wait and welcome sickness and discomfort in your home next winter?

Write us that we may tell you how the Dunning Boiler works, of what it is built and why we claim it to be the best boiler on earth.

New York Central Iron Works, 5 Main St., Geneva, N. Y.

ANTIQUES

A very large stock of OLD CHINA, Old Mahogany Furniture, Sheffield Plate, Old Blue Quilts, Copper, Brass and Pewter, Old Glassware, Brass Andirons, Jardinieres. Many Old Prints. Antique Jewelry. My New Catalogue contains descriptions and prices of hundreds of Antiques, sent free to any one interested.

MRS. ADA M. ROBERTS
Washington New Hampshire

Deadly Pills Kill Dandelions

and all other weeds. Puts them permanently out of business. No backache.

500 Pills and "Jabstick" prepaid \$1.00

Money back if you are not satisfied

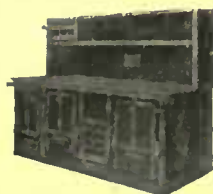
WILLIAM A. SPINKS & CO.
362 West Erie Street Chicago

SARGENT

Hardware Sargent & Co. 142 Leonard St. New York

Artistic Hardware and Locks for residence or public building. Many patterns

Catalogue on request



THE BEST RANGE THE YEAR 'ROUND THE DEANE COMBINATION
COAL AND GAS RANGE combines two complete ranges with ovens, gridiron broilers and toasters and all of the up-to-date appliances. This is but one of the many models we have in stock at our new display rooms, No. 261 West 36th Street.

Call or write for catalogue and full information on kitchen equipment.

BRAMHALL-DEANE COMPANY, 261 West 36th Street
COOKING APPARATUS OF ALL KINDS New York City

NO DELAY TO GET THE CLOTHES DRY ON WASH DAY



When using the "CHICAGO-FRANCIS" Combined Clothes Dryer and Laundry Stove. Clothes are dried without extra expense, as the waste heat from the laundry stove dries the clothes. Can furnish stove suitable for burning wood, coal or gas. Dries the clothes as perfectly as sunshine. Especially adapted for use in Residences, Apartment Buildings and Institutions. All Dryers are built to order in various sizes and can be made to fit almost any laundry room. Write today for descriptive circular and our handsomely illustrated No. D 12 catalog. Address nearest office.

CHICAGO DRYER CO. OR SHANNON MFG. CO.

830 So. Wabash Ave., CHICAGO, ILL.

124 Lexington Ave., NEW YORK CITY

Plant for Immediate Effect Not for Future Generations

Start with the largest stock that can be secured. It takes over twenty years to grow such Trees and Shrubs as we offer.

We do the long waiting---thus enabling you to secure Trees and Shrubs that give an immediate effect. Price List Now Ready.

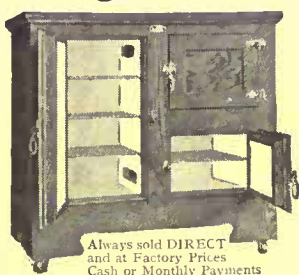
ANDORRA NURSERIES Box CHESTNUT HILL,
H. PHILADELPHIA, PA.

WM. WARNER HARPER, Proprietor

Write for Our Free Book on Home Refrigeration

This book tells how to select the Home Refrigerator, how to know the poor from the good, how to keep down ice bills, how to keep a refrigerator sanitary and sweet—lots of things you should know before buying any Refrigerator.

It also tells all about the "Monroe" with food compartments made in one piece of solid, unbreakable White Porcelain Ware, over an inch thick, with every corner rounded—no cracks or crevices anywhere, and as easy to keep clean as a china bowl.



Always sold DIRECT
and at Factory Prices
Cash or Monthly Payments

The "Monroe"



Each
Compartment
a solid piece
of
Porcelain
Ware.

The leading hospitals use the "Monroe" exclusively, and it is found in a large majority of the best homes.

The "Monroe" is never sold in stores, but direct from the factory to you on our liberal trial offer, Freight Prepaid.

Easy Payments. We are making a radical departure this year from our rule of all cash with order, and sell the "Monroe" on our liberal credit terms to all desiring to buy that way.

Just say "Send Monroe Book" on a postal card and it will go to you by next mail.

Monroe Refrigerator Co., Station 16, Lockland, O.

H. T. DEMPSTER CARRARA, ITALY

Maker of Statuary and Decorative Marbles

Designer and
Furnisher of

Italian Gardens

NEW YORK OFFICE, 39 EAST FORTY-SECOND ST.
CARRARA MARBLE

YALE FRUIT PRESS

The best, most practical and durable press on the market. Unequaled for making

Jellies, Jams, Cider, Grape Juice, Sausage, Lard and hundreds of other things.

Every home should have one. Saves time, labor and trouble and soon pays for itself.

The Yale Fruit Press is easily used and easily cleaned. Clamps to any table or handy place. Place cotton bag filled with material in colander, fix beam in position, attach crank to wheel and every pound pulled on same exerts 48 pounds pressure on contents.

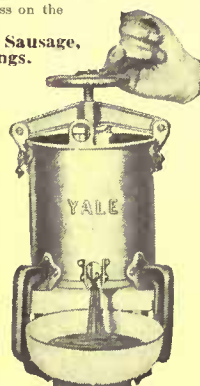
Made of steel and iron, plated.

Four quart size, price only \$3.95

If your dealer will not supply you, do not accept a substitute, but order direct of us. Sold on 10 Days' Trial. Money back if not satisfied.

Write today for FREE booklet—"Aunt Sally's Best Recipes"—of interest to every housewife. Also gives full description and prices of Yale Fruit Presses.

Patented and Sole Manufacturers
VICTOR M. GRAB & CO., P-1 Ashland Block
CHICAGO, U. S. A.



Hunt Big Game

Don't hesitate because inexperienced. Go this year, while there are still a few places left where you will see game that has never been hunted and have your hunting all to yourself. I can show you Mountain Sheep, Caribou, Moose, Grizzly Bears, in a country where no other white man has ever been and the game has not become dwarfed from the conditions which always arise after hunting is started. I make all arrangements, and personally manage expedition, preserve trophies, etc., as hunter companion; advise as to purchase of fire-arms and cameras and give instruction in shooting and wild game photography. References.

Address:— C. T. S.

Care of House & Garden

directly from the kitchen, as it lessens the valuable wall space. The rooms directly over the kitchen can best be utilized in most cases for servants' sleeping rooms, as they are often objectionable for members of the household, or guests.

Getting Acquainted with the July Flowers and Seeds

(Continued from page 22.)

with maroon or carmine, bearing the golden stripe down the center to set off the conspicuous maroon anthers. Beware of this famous beauty, though, for it too often repays all your care and feeding by dying slowly out. Really the only sure way of saving it in bloom is to buy fresh bulbs each year and set them either in pots in the cold frame or in the open ground as soon as it can be worked in the early spring. Another lily you should learn to know this month is *Lilium speciosum*, somewhat like the gold-banded lily in form, but smaller, with a waxy texture, charming fragrance, pure white in color with purplish spots on the reflexed petals. From three to ten flowers appear on a single stalk. Then a neighbor may present you to what he calls the day lily, which in reality does not belong to the lily family at all; it's botanical name is *Funkia subcordata*, and it is a tuberous-rooted plant bearing many stalks of its long, white, funnel-shaped fragrant flowers. Then there is also a yellow day lily, in bloom before this month (*Heemerocallis flava*), having the same sort of funnel-shaped flowers, three to eight on a stalk, but of a pale golden yellow color, also fragrant.

MONKSHOOD (*Aconitum Napellus*).—During this month and next you should make the acquaintance of this princess among the too few really beautiful blue flowers. In general habit it resembles the more widely known larkspur, but with a curious hooded flower that gives it its name. Unfortunately it is a poisonous plant, with some danger to children and those who know it not, hence its rather infrequent appearance in our gardens.

PHLOX.—You will meet two kinds of phlox in your quest, without doubt, for the perennial sort, *Phlox paniculata*, is one of the most common and dependable of garden favorites. There are all colors to be found in the large flower clusters with the exceptions of blue and yellow. Of lower growth and earlier bloom is the annual phlox, *Phlox Drummondii*, which may be found in red, crimson, primrose and white, the flowers borne in profusion in a spreading bushy tuft.

HOLLYHOCK (*Althaea rosea*).—Few people, even among the garden novices, will need an introduction to this old-time favorite of vigorous, stately growth and luxuriant bloom. The plant is a biennial, but perpetuates itself so freely by offsets and self-sowing that, once established in deep, rich soil, it will hold its place indefinitely. By all means note the simple beau-

Tell us your gardening experiences

THESE are the days when your garden begins to yield its reward and you can watch the growing success of your planning. Why not send us your experiences for publication in HOUSE & GARDEN? Your success in adding to the beauty and livableness of your home will help others; their accomplishments will help you. It's the best kind of reciprocity.

DON'T think you need literary ability to contribute; a real story tells itself, and we're sure yours is very interesting. HOUSE & GARDEN wants to know how you made your home what it is and the difficulties you contended with. Write up the description—about 2,000 words—and send it along with the pictures. It will command our usual rates. Or send us what snapshots you have, and if more pictures are needed we may be able to send our staff photographer.

DOES THIS SUGGEST WHAT YOU HAVE DONE?

An ugly prospect shut out by plants and foliage.
Making an unattractive building beautiful with vines and flowers.
Developing some perfect flower types.
Growing plants where others failed before.
Using wild flowers to advantage.
Making my vegetable garden pay.
Winning out in the struggle against garden pests.
A record breaking crop.
My successful hedge.
The seeds that sprouted first.
Beating Burbank at his own game.
My house in the woods.
A summer that paid for itself.
The way we conquered the frost.
How I showed the experts short cuts to success.
The house we built ourselves.
Turning a ruin into a home.
What was done in an hour each day.
The evolution of the prize garden.
What was done with a spade and two dollars' worth of seeds.
A child's garden.
Plants that came visiting.
My partnership with the birds.
A living from a back yard.
What I learned from foreign gardens.
Set-backs that lead to success.
Six months of bloom.
A garden in the sand.
Flowers that flourished in the shade.
The garden that Nature supplied.
Making the most of an acre.
A garden living-room.
The garden that started itself.
From a wilderness to a home.
What my garden means to me.
A child's paradise.
How we found contentment.
The house modeled on an historic home.
A city man's experiences in the country.
The little brown house.
A garden for every man.
The secret of my success.
How my garden grew.
My luck with roses.
The stars of my garden.
The most satisfactory plant.
Flowers I have grown.
The man who found himself.
What the seasons brought me.
The greatest recreation.
What a year brought forth.
My garden specialty.
What I have done with a small suburban plot.

We know you have a lot to tell, so let your enthusiasm run into your pen and mail the result to

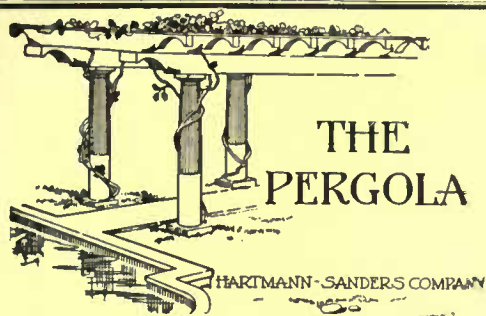
House & Garden, Experience Dept.
449 Fourth Avenue, New York, N. Y.

The Finest Evergreen GROUND COVERS

ANDROMEDA FLORIBUNDA, LEUCOTHOE
CATESBAEI, GALAX APHYLLA, MITCHELLA
REPENS AND OTHERS BEST PLANTS FOR
RHODODENDRON BEDS

CATALOGS

Highlands Nursery HARLAN P. KELSEY, Owner
(3,800 ft. elevation in
Carolina Mountains.) Hardy American Plants
and Salem Nurseries SALEM, MASS.



Send for catalogue No. P-27 of Pergolas, sun dials
and garden furniture, or P-40 of wood columns.

HARTMANN-SANDERS CO.

Elston & Webster Avenues, Chicago, Ill.
East office, 1123 Broadway, New York City

Exclusive Manufacturers of

KOLL'S PATENT LOCK JOINT COLUMNS

Suitable for Pergolas, porches and interior use.

Write for the
Connoisseur Book ON CUT
TUTHILL CUT GLASS CO. GLASS
MIDDLETOWN, N. Y.



FOR rent in Pelham Manor for term of years. All
modern improvements. Four living rooms on
ground floor with a fireplace in each. Five master's
bedrooms, three fireplaces, two baths, and two large
rooms on third floor. Large Kitchen and Pantry
with light, airy cellar under whole.
Further information may be obtained by calling
on or writing to,

E. K. GILLET, -
Pelham Manor, N. Y.

REMOVABLE STEEL CLOTHES POSTS



Cheaper than wood and
last a lifetime.

For full description write for
Folder D, or ask your dealer.

Milwaukee Steel Post Co.
Milwaukee Wisconsin

ty of the single varieties as compared with
the modern doubles.

PENTSTEMON.—Under its common name
of bearded tongue you may meet one of
the several varieties of this native peren-
nial. *P. barbatus* is the earliest in bloom,
appearing in June, its flowers light pink to
carmine, effective in a mass, but inconse-
quential when straggling. A blue pent-
stemon (*P. diffusus*) will be found in June
and July, somewhat lower in growth with
bluish purple flowers. *P. deustus* shows a
pale yellow flower and *P. Cobaea* purple to
white.

BLAZING STAR (*Liatriis pycnostachya*).
—You may come upon the long, grass-like
foliage and long spikes of purple flowers
of this little-known perennial in the light
soil of a neighboring wild garden.

PLUME POPPY (*Bocconia cordata*).—A
splendid plant of tall growth that in rich,
moist soil may become a weed. The
flowers are pinkish white, borne in fluffy
masses.

BALLOON FLOWER (*Platycodon grandiflorum*).—The largest bell-flower that is
commonly found, in blue, purple and white.
one to three feet high, the flowers meas-
uring three inches across.

BLANKET FLOWER or **GALLARDIA** (*G.
aristata*).—Another old-fashioned favorite
that is widely known. The brilliant red
and yellow daisy-like flowers bloom until
after frost if the seed-pods are not allowed
to form. To my own taste the flowers are
not particularly attractive excepting in a
few of the named varieties, such as the all-
yellow Kelway's King. There is also an
annual sort, *G. pulchella*, in yellow and
rose purple.

ANNUALS, BULBS AND TUBERS.

AGERATUM (*A. conyzoides*).—Learn to
know this best blue hardy annual for edg-
ing; its bloom extends over three months.

SWEET ALYSSUM (*A. maritimum*) sure-
ly needs no introduction. Make a note of
the fact that by cutting back the plants you
may induce bloom from July until after
frost.

AFRICAN DAISY (*Arctotis grandis*) may
be readily distinguished from among the
many other members of the daisy family
by its steel-blue centre surrounded by a
narrow gold edging inside of the white
petals.

BALSAM (*Impatiens balsamina*) will be
known by its habit of bearing its red, white
or yellow flowers in the axils of the leaves
along the stalk.

POT MARIGOLD (*Calendula officinalis*) is
the old-fashioned herb that our grand-
mothers used for flavoring soups. The
orange and yellow flowers appear over a
long period.

CANDYTUFT (*Iberis amara*).—In addi-
tion to sweet alyssum and ageratum, you
should know this less showy edging plant.
It is found in red and white, blooming
through a great degree of drought until
after frost. There is also a perennial candy-
tuft, *I. sempervirens*, excellent for edging
or for the rockery, but it blooms in June.

Dutch Bulbs and Plants direct from Holland

Have you ever seen a real Dutch Bulb catalog—
a catalog of Dutch Bulbs issued by the house
that grew them?

Do you understand the difference in sizes
and qualities that exist in Dutch Bulbs?
If you want fullest success next Spring,
you should make it a point to investigate

now, to plant some of our
bulbs along with the best
others you have been able
to buy. They will prove
their own case—we will get
all your future orders.
Impelled by the increas-
ing American demand for
the choicest bulbs



the largest growers of
Bulbs and Plants
in Holland

will hereafter sell direct to
the consumer from their
American Branch House.

This is the first direct
branch of any Dutch grower
in America—though the
same firm has branches in
other leading countries.

Our catalog will appeal to
all flower lovers—to the man who buys ten tulips, hyacinths or
daffodils, and the man who buys ten thousand—to those who
want Spring flowering bulbs outdoors, as well as those who
want the best for forcing indoors.

Our shipment of Dutch Bulbs for Fall Planting is now be-
ing made up. We suggest that you order early—as it will be
impossible to fill orders after this American allotment is sold.
A few prices which show what real first quality bulbs cost
when bought direct.

Hyacinths—\$2.00 per 100, up

Tulips—\$1.00 per 100, up

Narcissus (Daffodils)—75c per 100, up

Crocus—40c per 100, up

Shall we send that Dutch Bulb Catalog?

Gt. van Waveren and Kruijff

LOUIS BERGER, Manager

American Branch House, 527 Bourse Bldg., Philadelphia, Pa., U. S. A.

Home offices and nurseries, Sassenheim, Holland.
Other branches, Moscow, Russia, Leipzig, Germany,
Buenos Ayres, Argentine Republic.

MOOSEHEAD LAKE, MAINE

CAMP CARIBOU

Summer cottage on Lake shore, facing mountains; large,
fully furnished; seven chambers, bathroom; hot and cold
water, spring water; long distance telephone; bathing;
through Pullmans to Lake; trout, salmon and toque; daily
mail; rental, four hundred dollars, includes canoes, sail-
boat, ice, fuel, telephone and complete equipment. Refer-
ences, photographs and particulars.

F. S. SNYDER, 55 BLACKSTONE, ST., BOSTON, MASS.



LITTLE CHICKS How to Hatch and Rear Them Successfully

A new book that is serving as a reliable and instructive guide
to success in the hatching, rearing, feeding, care and develop-
ment of young chicks, by both natural and artificial means. A
comprehensive work which presents in clear and concise form
the teachings and experience gained by years of close study
and extensive experiments; gives trustworthy information and
advice covering every step of the work from the breeding pen
to the bringing of the chicks from the shell through their sev-
eral stages of development to maturity. In fact, it is a com-
plete and authoritative text book that every poultry keeper
should own. Consists of twelve chapters—fully illustrated.

SPECIAL OFFER: For a limited time we will send a copy
postpaid including a three years' subscription to "Poultry
Handbook," America's foremost poultry journal. All for
\$1.00. Address
United Poultry Publishing Co., Box H, Waterville, N. Y.



3 1/2 acres, Colonial Homestead of 14 rooms, large barn and other
out buildings. Located in heart of village opposite P. O., library
and store. Trolley passes door. Price, \$7500. Cash, \$4000.
Plenty of fruit and shade trees. This is only one of our bargains.

WRITE FOR LIST

CONNECTICUT FARMS REALTY CO., Inc.
534 Singer Building, 140 Broadway, N. Y. C.



Automobile Tours to Lake George and Lake Champlain

for those not owning their own cars

LAST month we announced an arrangement with a well-known tourist agency by which we were able to offer automobile tours of New England. The announcement of these novel trips met with such an eager response that we have arranged for another tour route up through the charming Lake George, Lake Champlain and Adirondack country. The route of the tour is from New York

**Up the Hudson
Lake Champlain
Lake George
Adirondack Mountains**

The total distance is about 750 miles and the tours cover a period of twelve days, entirely by automobile. The same kind of new 1911 high-powered seven-passenger touring cars provided for the New England tours will be used.

Route of Tour

Cross Fort Lee Ferry, ascend the Palisades and continue north along the west shore of the Hudson River past Nyack and West Point to Newburgh, through New Paltz and Kingston; along the eastern base of the Catskill Mountains to Catskill; continue through several quaint old Dutch villages past Albany to Saratoga; along the Hudson to Glen Falls, descending through a picturesque ravine and along the west shore of Lake George to Sagamore; through Hague and historic Ticonderoga, all the time along the shores of Lake George and Lake Champlain to Westport, continuing north to Lake Champlain on the right to Bluff Point, the apex of our Tour; proceed southwest through Ausable Chasm to Lake Placid, through Elizabethtown, following the Bouquet River through Pleasant Valley, past Dead Water Pond to Schroon Lake; continuing south through the Adirondack Mountains to Lake George; again passing through Saratoga and Cohoes to Albany; returning to New York on the east side of the Hudson River through Red Hook, stopping at Poughkeepsie and continuing on through Peekskill and Tarrytown.

Dates of Tour Leaving New York at frequent intervals during the summer.

For full information and folder describing tours in detail with prices, address

AUTOMOBILE TOUR DEPARTMENT

TRAVEL

McBRIDE, WINSTON & CO., Publishers,

449 Fourth Ave., New York



READ THE STORIES OF THE RECORD GAME FISH \$2,000.00 in Prizes ^{For the} Big Game Fish FIELD AND STREAM

"America's Magazine for Sportsmen" is offering 203 Prizes for the Biggest Fresh and Salt Water Game Fish Caught During 1911

This \$2,000.00 will be divided into 203 monthly prizes for the biggest fish caught each month and grand prizes for the entire season in each class. Prizes include ten silver cups, ranging from \$150.00 to \$50.00, silver medals, high-class rods and reels, guns and sportsman's equipment.

If you have caught a "big one" secure a copy of FIELD AND STREAM for conditions and list of prizes and send in your record at once. Whatever you do, don't miss the stories of the prize winners, telling How, When, Where and With What Tackle these big fish were caught, published in FIELD AND STREAM each month, beginning with the July number. Or take advantage of our Special Contest Offer of a three months' trial subscription to FIELD AND STREAM, together with the 1911 Angler's Guide, the best book on fishing published, telling How, When and Where to fish, including the latest Game and Fish Laws for 1911, and a five foot Split Bamboo Bait Casting Rod.

FIELD AND STREAM PUBLISHING CO., 29 East 21st Street, New York City

All for \$1.00
Regular Price, \$2.00

CANNA (*C. Indica hybrids*).—This tropical-looking plant probably needs no introduction, though its frequent appearance as the central feature of a circular bed in the center of a lawn may have persuaded you that closer acquaintance was undesired. Properly used, the new hybrids in red, yellow and nearly white, are well worth cultivating. The plant is a tender bulbous one, requiring winter storage in the cellar.

CALLIOPSIS OR **TICKSEED** (*Coreopsis tinctoria*) is one of the best annuals for cutting. The daisy-like flowers have yellow rays with a dark maroon base. Learn to know also the perennial *Coreopsis lanceolata*, blooming next month.

DAHLIA (*D. variabilis*) is a tuberous plant that surely is too well known to need a formal introduction. By all means learn to know all the new improved varieties you can find, beginning late this month and continuing through October. The man who once starts making acquaintances among the dahlias is bound to become a collector.

GLADIOLUS (*G. Gandavensis, Childsii; Lemoinei, etc.*), the sword lily—one of the showiest of the summer-blooming bulbs, whose pink, red, white, yellow and mixed flowers appear in heavy spikes. Make a note to plant the bulbs five inches deep—they are usually set too shallow and the weight of the stalk topples them over.

GLOBE AMARANTH (*Gomphrena globosa*).—A pink button-like flower of the everlasting type that, with so many others, is often given the name bachelor's button.

GOSETIA (*Oenothera amara, Oenothera*—*Whitneyi*).—One of the best and most showy large-flowered annuals for shady places; in red and white.

LAVATERA (*L. trimestris*) may be known by its hollyhock-like flowers of delicate rose—the best annual member of the mallow family.

MIGNONETTE, NASTURTIUM, PETUNIA and **VERBENA** are surely too well known to need comment.

NICOTIANA (*N. Tabacum*) has very long red or white flowers that are not otherwise showy, among the large leaves on four-foot stalks.

PORTULACA (*P. grandiflora*) is a low-growing plant with brilliant flowers in white, red and magenta, found at its best in dry places.

SALPIGLOSSIS (*S. sinuata*) has tubular flowers with large flat expansion, in shades of purple and blue, red, yellow, nearly to white, veined and mottled. A flower that once seen will not be forgotten.

SCHIZANTHUS OR **BUTTERFLY FLOWER** (*S. primatus*).—One of the best variegated annuals in violet, lilac and yellow in combination.

WISHBONE FLOWER (*Torenia Fourieri*).—A low, bushy plant with yellow, blue or purple flowers; a good substitute for the pansy in bedding.

ZINNIA (*Z. elegans*).—Another of the old-time favorites but you will find color clashes excepting in the named and well isolated varieties.

Summer Furnishing with Cretonne

(Continued from page 37)

French cretonne and finished at the edges with gilt braid have little glass knobs, but the more practical pieces are fitted with the tabs of cretonne.

The newest piece of cretonne furniture is the seat with boxes underneath that is intended to stand in a window or at the foot of a bed. It comes in several different lengths and has an upholstered cushion, kept in place by a little ornamental railing of wood around three sides, while the space under the seat is filled with boxes. The shorter seats have two shelves underneath with a box on each, and the longer ones have two boxes on each shelf with a partition in the middle. As pieces of furniture they are decidedly ornamental, and the idea of utilizing the lower part as a place for storing things is an ingenious one, to say the least.

Another new piece of cretonne-covered furniture, while not of the cabinet variety, is pretty and equally useful, and may be had in cretonne of any desired pattern. This is a case for slippers in the shape of a rather high stool, with an upholstered top that makes quite a comfortable seat. The stool is octagonal, with a lining of heavy material in a dark color, and fastened to this lining are pockets made of the same material, each large enough to hold a pair of slippers.

Even work-tables are made in a combination of wooden frame and cretonne-covered box, and follow out the idea of many of the old-fashioned models by having a deep pocket of the cretonne at the bottom of the box, which is set into a white enameled frame on four slender legs. The table is so effective, besides being light and easily handled, that even though there may be no cretonne to correspond in the furnishings, it is quite suitable and does not seem out of place in a bedroom of any description.

For a room in which these cabinets and other cretonne pieces are used, the most suitable chairs are of willow, painted or enameled in white, with cushions that match the furniture and hangings. The color and design are a matter of one's individual taste, as the furniture may be had to order as well as in stock patterns. Large-figured cretonnes that are correct reproductions of English chintz of the 18th century period are more or less of a novelty and quite popular, but however appropriate they may be for curtains and draperies, they are hardly suitable for the box furniture. Small patterns in floral effects are more tasteful, and a design new this season, that is largely used for the cabinets made up in sets seems to have just the right proportion of white background and colored figures. It is decidedly conventional, showing clusters of leaves intertwined with a heavy cord and tassel design, and comes in a number of attractive colorings suitable for bedrooms and boudoirs.

YOU CAN HAVE ELECTRIC LIGHT IN YOUR SUMMER HOME



ALAMO GASOLINE ENGINES, WESTINGHOUSE GENERATORS

You can have electricity in your home for lighting, heating or running vacuum cleaners, washing machines, electric irons, toaster, stoves—in fact anything that operates by electricity. You can also run machinery of all kinds, such as pumps, lathes, etc.

Let us show you one of our electric plants in operation. All of the apparatus guaranteed.

Write for catalogues and full information to

ALAMO MANUFACTURING CO., HILLSDALE, MICH.

New York Office: OTIS & WELLS, 2 Rector St., New York

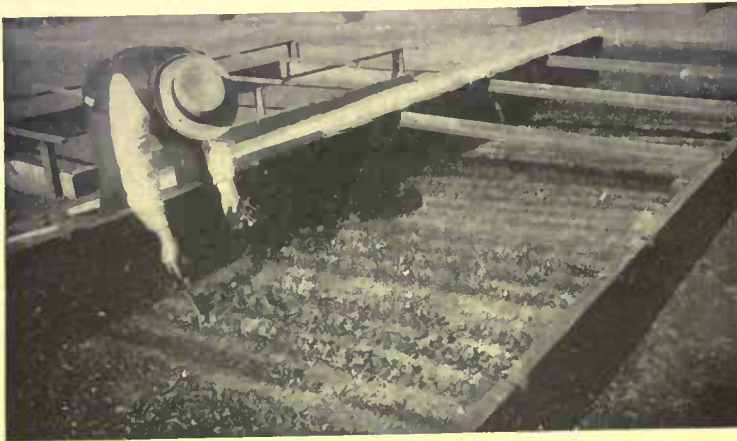
Inexpensive Homes of Individuality



THE prospective builder can find no more adequate or valuable assistant in determining the style, construction and decoration of his home than this book *Inexpensive Homes of Individuality*. It contains plans and photographs of houses moderate in size and of greatest architectural merit and is full of just such suggestions as the man about to build will appreciate. It offers an opportunity to study in detail some of the best homes in the country of many different styles and varying in cost from \$2,000 to \$8,000.

Mr. Frank Miles Day, past President of the American Institute of Architects, has written the introduction on the choice of a Style for the Country or Suburban Home. Within the sixty-four pages there are over one hundred and twenty-five illustrations and plans, made doubly illuminating by information pertinent to cost, location and details of construction. Printed on coated paper with an attractive art cover design in two colors. Price 25 cents, postpaid.

McBride, Winston & Company, Publishers
449 Fourth Avenue, New York



The planting and transplanting of vegetables are simple problems if you have *Home Vegetable Gardening* to guide you.



The *Landscape Gardening Book* will show you how to plan and plant your grounds in such effective ways as this.

TWO IMPORTANT NEW GARDENING BOOKS

Home Vegetable Gardening

By F. F. ROCKWELL

THERE are many books that treat of vegetable gardening, fruit growing and the like in an encyclopaedic way. They tell what vegetables there are, what pests are liable to attack them, and so on, but they usually give far too much information for the man who wants to establish a vegetable garden on his own country place or suburban plot for the family use. The author, F. F. Rockwell, is a practical gardener himself. He realizes from long experience just what the average layman wants to know in order to raise a successful and varied crop of vegetables. Exactly this information is presented in this practical volume. While not fulsome, this book covers every essential, from preparing the soil to the last cultural directions for the proper maturing of the crop. The author has treated the subject in an amazingly concise and entertaining manner.

HOME VEGETABLE GARDENING is the one complete yet concise book on home vegetable gardening. It includes as well the equally important subjects of growing berries and fruit. The book is uniform in size and binding with THE GARDEN PRIMER, but with many more pages.

Cloth, 12 mo, \$1.00 net. Postage 8c.

The Landscape Gardening Book

By GRACE TABOR

THERE have been many books published within the past few years on the various branches of gardening, but most of these have dealt with the cultural side exclusively. The larger subject, embracing the whole site of the country home, particularly one of moderate size, has apparently been ignored. The author of THE LANDSCAPE GARDENING BOOK, a well-known landscape architect, has written the one book that solves the whole problem of making a home out of a house and plot. The book shows just how to plan the home grounds, whether they consist of a suburban plot or a large estate—how to plan the entrance walks and driveways; how to plant trees so that they will give the most value in shade and beauty; how to group and plant shrubbery for a harmonious mass as well as a succession of bloom; how to make the grounds attractive in winter—in short, this is the one essential book for the man who would have his home something more than a mere building set on the earth. Planting tables, lists of plants and cultural instructions are added in condensed form at the end of each chapter. The illustrations are superb half-tone reproductions of representative gardens and homes, together with practical diagrams and planting plans adaptable to any sized place.

Bound in dark blue cloth, stamped in gold with a garden inlay in full color. 8 vo, \$2.00 net. Postage 20c.



The Garden Primer

By GRACE TABOR

and

GARDNER TEALL

Indispensable to Every Garden Maker

THE Garden Primer, as its title indicates, is a handbook of practical gardening information for the beginner, covering every branch of the subject from preparing the soil to the gathering of the fruit and flowers. In it is set forth, without any confusing technicalities, just the information that will enable the amateur to grasp quickly the essentials of garden-making. The authors in preparing this book have drawn from their long experience, and in writing it assume no knowledge of the subject on the part of the reader. There has been great need of a book of this kind, yet, so far as we know, no volume has ever been published that treats the subject in this charmingly simple way. While dealing with first principles this volume has an equal interest for the advanced gardener, who will find much of value in the experiences of the authors, and in a fresh presentation of a subject which always abounds in new methods and discoveries.

A profusion of illustrations show every phase of gardening, growing vegetables and flowers, fertilizing, pruning, cultivating, spraying and a thousand and one helpful and necessary things. Planting tables direct the beginner throughout the year and an index makes the book instantly accessible for reference.

McBRIDE, WINSTON & CO., :: Publishers :: 449 Fourth Avenue, New York



Adou Scherrer, Architect.

INDIANAPOLIS PEOPLE

are building a lot of good houses of moderate cost. This one is particularly pretty because of its nicely grouped casement windows, which also make it particularly comfortable these warm summer days and nights.

Our famous Adjusters on the sash work easily and securely from *inside* the screen. No flies, *no bother*, just comfort all the time.

Our free little book tells why.

CASEMENT HARDWARE CO.
175 N. STATE STREET : : CHICAGO



Send 15c. New Booklet.

GARDEN POTS

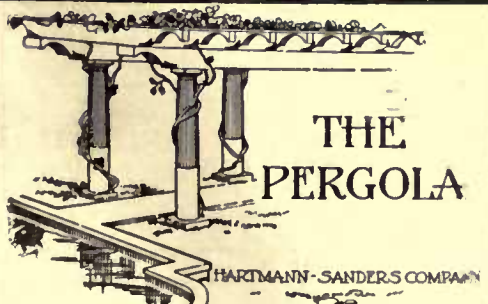
UNIQUE DESIGNS, FINE
WORK, EVERY STYLE.
FOUNTAINS, PEDESTALS

EXPERT
FRANCIS HOWARD
5 West 28th St. New York

GARDEN BENCHES



PORCH - FURNITURE -
CAMBRIDGE GARDEN-FURNITURE SHOP
- 6 PEARL ST. CAMBRIDGE MASS -



THE PERGOLA

HARTMANN-SANDERS COMPANY

Send for catalogue No. P-27 of Pergolas, sun dials
and garden furniture, or P-40 of wood columns.

HARTMANN-SANDERS CO.

Elston & Webster Avenues, Chicago, Ill.
East office, 1123 Broadway, New York City

Exclusive Manufacturers of

KOLL'S PATENT LOCK JOINT COLUMNS

Suitable for Pergolas, porches and interior use.

ARTISTIC EFFECTS FOR COUNTRY ESTATES

THE ornamental fixtures best adapted to your grounds may be selected with ease from our catalogues. There are shown designs for all conditions—some very simple, others more elaborate; all being original and of true artistic merit.



We issue separate catalogues of Display Fountains, Drinking Fountains, Electroliers, Vases, Grills and Gateways, Settees and Chairs, Statuary, Aquariums, Tree Guards, Sanitary Fittings for Stable and Cow Barn.

ADDRESS: ORNAMENTAL IRON DEPT.

J. L. Mott Iron Works, Fifth Avenue and 17th Street, New York



AS THE PLACE "RUNS DOWN" THE COSTS RUN UP.

(A JOKE TO EVERYBODY BUT THE OWNER)

"STOP DEPRECIATION BEFORE IT BEGINS
BUILD WITH CYPRESS AT FIRST!"

INSIST on "THE WOOD ETERNAL" (AND NO SUBSTITUTES!)
GET IT OF YOUR NEAREST LUMBER DEALER.

Write our "All-round Helps Dept." for list of volumes in the famous
"Cypress Pocket Library," covering 32 uses of WOOD. Sent free by

SOUTHERN CYPRESS MFRS. ASSOCIATION
1210 Hibernia Bank Building, NEW ORLEANS, LA.

IN COUNTRY HOMES WHERE QUALITY COUNTS
you will find the



BRUNSWICK
HOUSEHOLD
REFRIGERATING
and ICE MAKING PLANTS
PERFECT REFRIGERATION
INDEPENDENCE OF THE ICE MAN

Each plant designed to meet the requirements of the individual home, and guaranteed to do the work that it is designed for.

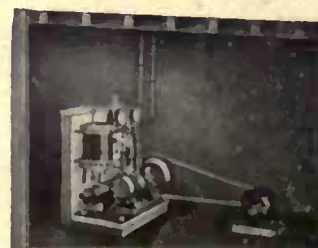
A postal mailed today will bring you full information by next mail, or a representative will call by appointment.

Write for list of installations and if you are not convinced on the spot you will at least be interested and the game half won.

Our strongest argument is the testimony of Brunswick users.

It will be worth your while to investigate.

The Brunswick Refrigerating Co.
New Brunswick, N. J. Branch Offices or Agencies in Principal Cities





REAL ESTATE DEPT.



PHILIPSE MANOR

NEW YORK

"A Mile on the Hudson"



The only development within commuting distance of New York that has an actual frontage upon the Hudson River, 26 miles from Grand Central Station. (Tarrytown one mile south.)

Attractive New Homes typifying the highest development of suburban architecture, may be purchased on a mortgage basis of FULL COST of House at Five Per Cent. interest.

Choice Plots—On Easy Terms

An exceptional opportunity is offered NOW to secure desirable locations at attractive prices. Building money furnished.

All Improvements Installed including sewers, water, gas, electricity, macadamized roads, sidewalks and curbing. The new Philipse Manor Station is the finest of its size in America. Frequent train service—within one hour.

Write for booklet and particulars. Address Department L.

Ye Olden Philipse Manor House (Erected 1683) Now Open. First Class Catering.

Cooley & West Inc.

Telephone Murray Hill 4430

331 Madison Ave., N. Y.

TIDEWATER VIRGINIA

Fine river-front plantations on the James and York rivers; 1,212 acres, with old Colonial house, \$80,000; 2,200 acres, \$60,000; 545 acres, \$20,000; 700 acres, \$12,000; 200 acres, \$12,000; 200 acres, \$5,000; 135 acres, \$3,500; also small farms either with or without water fronts. For particulars, address

DEVERELL & COMPANY
Claremont, Va.

Princeton

Splendid homes. Delightful surroundings. Convenient to both New York and Philadelphia—express train service.

Rentals \$300 to \$6,000 a year. Tastefully furnished homes also for rent.

Choice properties in other localities for sale or rent, furnished or unfurnished.

WALTER B. HOWE, Princeton, N. J.
New York Office, 56 Cedar Street.



HOMES at SHORT HILLS

In New Jersey's Most Exclusive Residence Section

Near BALTUSROL GOLF CLUB and
CANOE BROOK COUNTRY CLUB

Invigorating mountain air; broad outlook; pure, unfailing water supply; all city improvements. Forty minutes, express trains.

We Build for You from your own plans, or you can build for yourself. Convenient terms arranged. Write today.

Distinctive Houses ready and building. Can be changed in interior plan and finish to suit your individual taste.

**ROCHE
CRAIG
& WILEY**



165
Broadway
New York
Suite 1303

Have you ever tried AIKEN?

Have you a WINTER HOME?

IF NOT—I can sell you Deodora Cottage, renting for \$2000. Aiken is the place for rest, amusement and recreation. Golf, Tennis, beautiful drives and electric lights. I have many other attractive homes for sale or rent, and I am sure I can suit you—Let me

TRY—JOHN LAIRD, AIKEN, S. C.
Write for renting list.

VILLA SITES OVERLOOKING THE TOWN OF BEVERLY AND MASSACHUSETTS BAY

Sixty acres for sale in lots as the purchaser desires, For further details address

H. A. Wyckoff, 274 Clinton Avenue, Brooklyn, N. Y.



NOT "THE WORLD BEAUTIFUL"

but the most beautiful spot in Greater New York City is at Little Neck Hills, with its giant old trees, quaint old homesteads, and winding avenues. Its succession of beautiful hills slope to the south from Broadway, rising one above another till they overlook the far-famed Douglas Manor, Little Neck Bay, Connecticut, across the Sound, the sky line of Manhattan and on even to the Palisades across the Hudson. To see Little Neck Hills means that you will want your "House and Garden" there forever. Our prices are moderate and terms attractive and property perfect.

Dwight-Murray Realty Co., 47 West 34th Street, New York



GREENWICH, CONN.

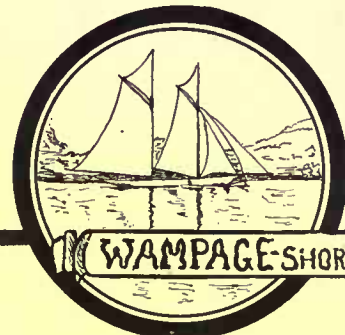
FOR SALE

Small estate of 3 acres, beautiful shade trees, large vegetable and flower gardens. House of 10 Bedrooms, 4 baths, large stable and garage.

This is one of many delightful estates that I am offering for sale in beautiful Greenwich.

Write for descriptions.

LAURENCE TIMMONS
Greenwich Tel. 456 Conn.
Opp. Depot



WAMPAGE SHORES

WATER FRONT PLOTS
with Beautiful
PRIVATE BEACHES

at

WAMPAGE SHORES, L. I.

35 minutes to New York
R. R. Station Port Washington
1-4 ACRE OR MORE

IThe beautiful country, dotted with the fine estates of many wealthy New Yorkers in the immediate neighborhood of "WAMPAGE SHORES" the great attraction of the clear waters of the Sound, the quality of improvements (all wires in conduits) make "WAMPAGE SHORES" the most ideal home place in the vicinity of New York.

"SOLD AT NOT TOO GREAT COST"
WRITE FOR ILLUSTRATIONS

S. OSGOOD PELL & CO.
542 Fifth Ave. Tel. 5610 Bryant



"Edgemont Estate" At Scarsdale Station

The ideal realization of out-of-town living. A delightful home community, for all-year residence. Protected social environment, the charm of the country, all city improvements. Immediately at station, only 19 miles on Harlem Elec. Div. N.Y. Cent. R.R. Special advantages to be secured for those building during the present season.

Write for Booklet A

Scarsdale Company

J. Warren Thayer, Pres.
Scarsdale 503 Fifth Ave.
New York New York City



Q. Timely outdoor articles, splendid photographs and breezy fiction make the AUGUST OUTING, our big mid-summer number, the best of the season.

Q. There's canoeing and sailing, bird photography and country living, fishing, motoring and motor boating. Diversity aplenty for everyone.

Q. This issue will convince you that, more than ever before, OUTING should be your guide along the various paths of the outdoors.

Q. Let us make your acquaintance by accepting our six-months trial subscription for \$1.00. The yearly subscription rate is \$2.50. All newsstands 25 cents. Liberal offer to local representatives. Write for terms.

OUTING PUBLISHING COMPANY
315 FIFTH AVENUE
NEW YORK CITY

OLD DOMINION LINE VACATIONS AFFORDING PLEASURE AND REST

A SHORT SEA TRIP TO
OLD POINT COMFORT, NORFOLK, RICHMOND and WASHINGTON, D. C.

Round trip tickets, including meals and state-room berth on Old Dominion Steamers,

NEW YORK
TO
NORFOLK
OR
OLD POINT
and return
\$14.00



Round trip tickets, including meals and state-room berth on Old Dominion Steamers,

NEW YORK
TO
RICHMOND
OR
WASHINGTON,
D. C. and return
\$15.00

THE ONLY DIRECT LINE TO OLD POINT COMFORT AND NORFOLK WITHOUT CHANGE

Steamers are all equipped with the United Wireless Telegraph System
Hot or Cold Sea Water Baths may be procured on Steamer without charge

STEAMERS SAIL EVERY WEEKDAY AT 3 P. M.

Tickets and Stateroom Reservations, Pier 25, North River, Foot of North Moore Street, New York

SEND FOR ILLUSTRATED PAMPHLET, DESK "H. G."

W. L. WOODROW, Traffic Manager

J. J. BROWN, General Passenger Agent

General Offices, Pier 25, North River, New York

Holland House NEW YORK CITY

Fifth Ave. & 30th St.
Near Underground and Elevated
Railroad Stations



FAMOUS MANY YEARS

As the Center for the Most Exclusive
of New York Visitors

COMFORTABLY and LUXURIOUSLY
appointed to meet the demand of the
fastidious or democratic visitor.

Royal Suites.

Rooms Single or En Suite.
Public Dining Room. New Grill.
Private Dining Saloon for Ladies.
After Dinner Lounge-Bar.

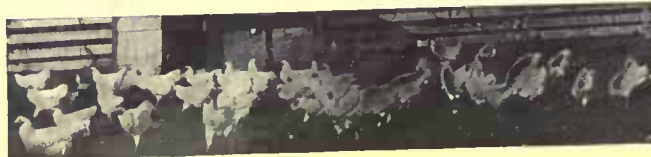
ALL THAT IS BEST IN HOTEL LIFE AT
CONSISTENT RATES.

Booklet, HOLLAND HOUSE, 5th Ave. & 30th St.

FOR SALE AT GREENWICH, CONN.

On the water front, an attractive stucco residence, containing 12 masters' bed rooms, 6 baths, 5 servants' rooms. Living rooms are large and airy, large veranda. Attractive grounds of about 6 acres with lawns and gardens, tennis court, garage with living apartments above. Good sandy bathing beach, anchorage, dock, water on three sides. No marsh land or mud flats. 1½ miles from station over good roads. This property has been inspected and is recommended by this office. IT MUST BE SEEN TO BE APPRECIATED.

THOMAS N. COOKE, Smith Bldg., Tel. 430, Greenwich, Conn.



POULTRY DEPARTMENT

The purpose of this department is to give advice to those interested in poultry. The manager will gladly answer any troublesome questions. Address "Poultry Department" and enclose a self-addressed envelope.



ONE OF THE SIGHTS IN OUR PARK

We carry the largest stock in America of ornamental birds and animals. Nearly 60 acres of land entirely devoted to our business.

Beautiful Swans, Fancy Pheasants, Peafowl, Cranes, Storks, Flamingoes, Ostriches, Ornamental Ducks and Geese, etc., for private parks and fanciers. Also Hungarian Partridges, Pheasants, Quail, Wild Ducks and Geese, Deer, Rabbits, etc., for stocking preserves. Good healthy stock at right prices.

Write us what you want.

WENZ & MACKENSEN

Proprietors of Pennsylvania Pheasantry and Game Park

Dept. "H. G." Bucks County, Yardly, Pa.



RABBITS AND PET STOCK

Unrivalled Flemish Giant, Angora, Tan and Polish Rabbits—Peruvian and Smooth Cavies for fancy or pets. Same Good Youngsters now for sale, \$1.00 up

ELM COVE RABBITRY, Great Neck, L. I.

Maplecroft Rhode Island Reds

win at all the leading shows. "It pays to buy the best." Stock and Eggs for sale in large quantities. Send for Circular and Mating List of S. C. Reds. J. G. Dutcher, Prop. Address

Maplecroft Farms. Pawling. New York



White Orpingtons

They lay like slot machines
Beautiful white chickens
for the lawn, as useful as
they are ornamental.

Lawrence Jackson

Box H, Haysville, Hingham County, Pa.



LITTLE CHICKS

How to Hatch and Rear Them Successfully
A new book that is serving as a reliable and instructive guide to success in the hatching, rearing, feeding, care and development of young chicks, by both natural and artificial means. A comprehensive work which presents in clear and concise form the teachings and experience gained by years of close study and extensive experiments; gives trustworthy information and advice covering every step of the work from the breeding pen to the bringing of the chicks from the shell through their several stages of development to maturity. In fact, it is a complete and authoritative text book that every poultry keeper should own. Consists of twelve chapters—fully illustrated. SPECIAL OFFER: For a limited time we will send a copy postpaid including a three years' subscription to "Poultry Husbandry," America's foremost poultry journal. All for \$1.00. Address
United Poultry Publishing Co., Box H, Waterville, N.Y.

BUFF ORPINGTONS

Are the Greatest
Utility Breed



"CHAMPION NEW YORKER"
The "Joe-Pye Book," 20 pages
Illustrated, sent on request

The 1st prize cock at Madison Square Garden, New York; also 1st and shape and color special at Boston, 1911; is but one of many fine birds of his same blood lines in my yards.

Stock and Eggs for Sale



JOE-PYE!
South Norwalk, Conn.,
R. F. D. 37

POULTRY

If you have any prize birds or good poultry that you would like to dispose of, place your advertisement in this department and bring it to the attention of thousands of our readers. We are glad to advise buyers of poultry as to reliable dealers on request. If there is anything that you wish to know about poultry, their care, feeding, etc., write us and we will gladly answer your question.

Address Manager Poultry Dept.

HOUSE & GARDEN

449 Fourth Ave. New York

SHETLAND PONIES



An unceasing source of pleasure and robust health to children. Safe and ideal playmates. Inexpensive to keep. Highest type. Complete outfits. Satisfaction guaranteed. Illustrated catalogue free.

BELLE MEADE FARM
Box 19, Markham, Va.

Baby Chicks of Quality

Sent by Express Direct to You

Why bother with eggs? I can supply you with healthy young chicks at once and guarantee them to reach you in good condition. Fishel Strain White Plymouth Rocks, S. C. R. I. Reds. Prices reasonable.

Chick Catalogue Free.

R. C. CALDWELL, Box 1030, Lynden, Ross County, Ohio

G. D. TILLEY

Naturalist

Rare Land and Water Birds

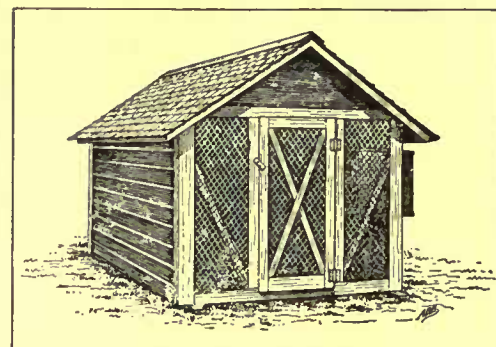
Swans, Geese, Ducks, Peafowl, Cranes, Pheasants, etc. I am the oldest established and largest exclusive dealer in ornamental birds in America.

G. D. TILLEY, Naturalist
DARIEN, CONNECTICUT

The Best Colony Houses for Poultry

THE main requirements of a good poultry house are good ventilation and protection from storms and cold winds. Hens will not lay when weather conditions prevent them from scratching and exercising. Many poultry houses have failed because the variations in night and day temperatures were too great. At many of the experiment stations it has been found that open-front houses are more successful than houses with glass windows.

J. Dryden and A. G. Lunn, in a circular of the Oregon Experiment Station, state that ventilation can best be fur-



The Oregon type of colony house, one end of which is open except for a covering of burlap or canvas

nished by leaving one end of the house open or covered with burlap or canvas, using no glass windows unless necessary for light. The idea of building a warm house should be abandoned. It is shelter that is needed. The house should be built in such a way that the fowls will not roost near the open front where they would be exposed to winds; nor should it face the prevailing winds. A long house is more expensive to build, for a given capacity, than one more nearly square. A long, narrow house is also a cold house, having more exposed surface for a given capacity than a square house.

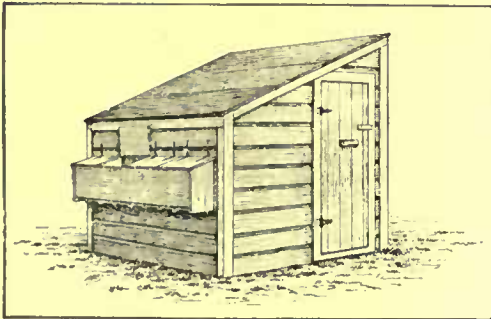
The size of house necessary for a certain flock will vary in different sections. Where there is little or no snow and where the fowls can be outdoors every day in the year, two square feet of floor space per fowl will be ample. Where the climate is such that the fowls will seek shelter part of the year, rather than go outdoors on the range, considerably more space should be provided, say four to five square feet per fowl. The idea should be not to crowd them so much that their activity will be interfered with. Whether the shelter is provided by enlarging the house or providing cheap scratching sheds is immaterial. Two square feet per fowl, or even less, is ample for roosting quarters.

W. S. Jacobs, of the Arkansas Station, states that roosts should be made low or near the ground—not higher than 2 feet. There are several reasons for this. Fowls

of the heavier breed can not fly high, and those of the lighter breeds frequently injure the soles of their feet in jumping from high perches. Roosts should be made all the same height; for if they are made some higher than others the birds will all flock to the highest ones and crowd, which is undesirable.

When dropping boards are used they should be low down, to permit of easy cleaning. They should be made of matched lumber and be 20 inches wide for one perch and 3 feet wide for two perches, the first perch placed at least 10 inches from the wall. A good roost may be made from material 2 by 2 inches, then slightly rounded on the edges.

According to Dryden and Lunn, poultry keeping is most successful where



A colony house showing the arrangement of trap nests recommended by the experiment station

the colony system prevails. The colony system means the housing of fowls in small houses, preferably portable, where the fowls have free range. The chief advantage is that the fowls are more active or busier than when confined in yards; second, there is less danger from outbreaks of disease, as it is possible to keep the houses on clean ground by moving them occasionally; and third, the fowls require less feeding and care, as they pick up considerable food on the range. Another advantage of this system is that the fowls will rid the farm of many injurious insects, such as grasshoppers. Then, too, the colony system will fit in with crop rotations and for part of the year the fowls will live on the stubble fields.

Poultry Notes

WHEN fowls are lazy in the matter of laying, yet seem otherwise well, an excellent tonic is Epsom Salts. Mix the salts through the mash, in the proportion of one tablespoonful to every twelve hens, and feed three mornings in succession; skip three mornings, then feed again until at least three courses of the tonic have been taken. You will find an improvement almost at once, and eggs will soon be plentiful.

A WARM weather brooder for motherless chicks may be made at home from a drygoods box. The box may be any size desired, but the depth should be

A CORBIN Night Latch affords absolute safety

Not only for the home, but for the factory, store-room locker, garage—endless number of places where additional security or privacy is desired.

Not expensive, either.

In fact, a Corbin Night Latch may many times be the means of saving you hundreds of dollars by protecting you from malicious invaders.

There's a reliable dealer in your city who can supply you with the Corbin Night Latch.

Don't you think you had better see him immediately.

Anyway write today for leaflet

(O K 32) the Newest Corbin Night Latch.

P. & F. CORBIN

NEW BRITAIN, CONNECTICUT

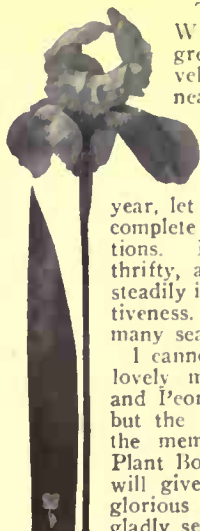
P. & F. Corbin
of New York

P. & F. Corbin
of Chicago

P. & F. Corbin
Philadelphia

CORBIN

Put New "Atmosphere" in Your Hardy Garden with Farr's Splendid Irises and Royal Oriental Poppies



The quaint, dainty Irises of Wyomissing Nurseries, in greatest variety, and my great, velvety Oriental Poppies in nearly every shade, are through blooming and for a few weeks may be moved safely.

If you plan a finer and better flower garden next year, let me supply particulars, with complete lists of varieties and descriptions. My plants are large and thrifty, and with ordinary care will steadily increase in vigor and productiveness. They assure success for many seasons.

I cannot tell you how bewitchingly lovely my Irises, Oriental Poppies and Peonies have been this summer; but the camera has helped preserve the memory, and my new Hardy Plant Book—soon to be completed—will give you a faint idea of the glorious showing they made. I will gladly send you a copy. My special Catalogue of Fall Bulbs is ready now.

BERTRAND H. FARR, Wyomissing Nurseries
643 F PENN STREET, READING, PA.

SHARP Rotary Ash Receiving System



SO SIMPLE A CHILD CAN OPERATE IT

Does away with unsightly ash barrels—the inconvenience and drudgery of ash disposal. No piling of ashes on the cellar floor—no furnace dust in your living rooms. Unsanitary conditions corrected; all waste matter is contained in removable, strong, iron cans with the ashes in a cement-lined vault. All odors and dust go up the chimney. Mechanically perfect—a practical solution of the ash and garbage nuisance, guaranteed to give satisfaction.

EASY TO MOVE ASHES IN PORTABLE CANS

The Sharp Rotary Ash Receiving System can be installed in any building, old or new, under any style of house-heating furnace or boiler, before or after it is in operation. Ashes fall directly into strong iron cans that revolve easily as filled.

Endorsed by Health Officers, Architects and Heating Contractors. Worth while to investigate before you complete your building plans.

Write Today for illustrated catalog of practical demonstrations and testimonials. Dealers' and Architects' names appreciated.



W. M. Sharp Company
217 Park Ave. Binghamton, N. Y.

Holds 6 to 10 weeks' ashes, removal of which is no effort.



KENNEL DEPARTMENT

The purpose of this department is to give advice to those interested in dogs. The manager will gladly answer any troublesome questions. Address "Kennel Department" and enclose a self-addressed envelope.



FOX HOUNDS BIRDSONG and WALKER STRAINS

sent on ten days' trial. Drag packs for hunt clubs a specialty; guaranteed to please. Get my liberal guarantee. Also a few coon dogs and several youngsters for sale.

R. F. Johnson,

Assumption, Ill.

TOY WHITE FRENCH POODLES, young and grown stock. Pedigreed. Prices reasonable. Also Toy Spitz Pomeranian pups. Write your wants.

MRS. G. C. ROHDE,
Ann Arbor, Mich.



Boston Terriers

We have a number of exceedingly high-class puppies, sired by "Ch. Lord Bell Rock," and other prize winning lightweights, for disposal, satisfaction guaranteed.

For a house dog or companion, the Boston Terrier is in a class by himself. Prices from \$20.00 up.

WINCHESTER KENNELS
119 Winchester St., Toronto, Ont.
Ch. LORD BELL ROCK, at Stud, fee \$15

Send your name and address to-day for a FREE SAMPLE COPY OF DOGDOM the oldest, largest and only high-class EXCLUSIVE DOG MAGAZINE published. Fully illustrated. Printed on enamel paper. Beautiful original cover designs. Over fifty pages of dog advertisements each issue. Price \$1.00 a year which includes three premium pictures 12 x 16 inches, nice enough to frame and suitable for den or study.—Address

DOGDOM PUBLISHING CO.

Battle Creek Michigan

FOR SALE

Twenty-two Choice Collie Pups, Sire, Ormskirk, Artist and other good ones.

W. H. GRAY, : : Brookville, Pa.

If You Have a Dog

You Should Read

FIELD AND FANCY

the only weekly in America devoted exclusively to the dog. Sample and Special Trial subscription Offer on application.

FIELD AND FANCY, 14 Church St., New York City



THE KENNEL REVIEW
and OUTDOOR LIFE

Both one full year for \$1.75, regular price of the two \$2.50. Send all orders to

THE KENNEL REVIEW
Kansas City, Mo.

In Hot Weather Feed "Osoko"

The Paramount Dog Food. It will keep your dogs in condition.

MANUFACTURED BY

Spillers & Baker, Ltd., Cardiff, England

Send 4c. in stamps for Booklet and set of four colored post cards of prize dogs

H. A. ROBINSON & CO., Dept. H, 128 Water St., NEW YORK CITY



HOUSE AND GARDEN

no more than eight or ten inches. First nail cleats on the outside of the bottom to raise the box from the ground, and cut a small door on one side, providing leather hinges and a strap for fastening it when open. On the under side of the top (which is separate from the box) nail strips of flannel cloth which has been slashed in strips as long as the box is deep; the strips should be set about three inches apart, so that they hang down inside the box when the cover is in place, so the little bodies may snuggle in between the flannel strips without being entangled, and thus keep as warm as though among feathers. Set the box in the sun (or in a warm room) and open the door, providing a bridge so that they may run out and in as desired.

M. E. S. H.

Summer Care of the Dog

ALTHOUGH these August days are so often spoken of as dog days, the name certainly does not represent the fact from the dog's standpoint. Indeed such treatment is accorded him that the hot weather often sees an end to his sojourn among us. Sedulous for our own comfort we change our diet, clothing and manner of living and forget the dog we have made to rely so much upon us for support. Sometimes his own endeavors to obtain relief are thwarted by the children, who alone of all animals seem to be oblivious to the scorching weather and who seem rendered more active and mischievous by the very oppression which wearies the rest of us. Perhaps a plea for consideration will not fall upon barren ground; let us turn a little attention from our perspiring selves to our friend the dog and keep him from the evil results of a heating diet, and torment at the hands of his wards, the children.

The first consideration should be that of quenching the dog's thirst. In thousands of cases he is parched with thirst while the dripping ice pitcher stands just beyond his nose tantalizing him to the point of madness. Provide for your pet's comfort as well as your own; have a bowl of fresh water in an accessible place and kept as cool as possible. Out of doors some arrangement should be made for drinking, either a trough or water-pan, where the dog can find it, or else he may suffer the consequences of drinking foul water, which are often disastrous. If you have been urged to keep a stick of sulphur in the water and cannot resist, be assured that it is as harmless as the water itself, but has no cooling virtue.

Sulphur may be used to advantage in cooling the dog in hot weather, but it should not be used in the stick form. Mix equal parts of powdered sulphur and magnesia thoroughly together and put as much as will cover a ten-cent piece in the evening meal. Continue this treatment for a week, stirring the medicine well into the food each night. This will be found to have a cooling effect, and will help to keep the animal in condition. If your dog is a



Collies

Elegant high-quality Collie puppies, sable and white, from best strains of blood; have been carefully raised, are in perfect health. Eligible to registration American Kennel Club Stud Book. Ready for delivery, shipped on receipt of price. We take great care in selecting each puppy. We will please you. Males \$20 each; females \$15 each.

Nice grown male Collie \$50
Our booklet sent on receipt of stamp.

address Pine Grove Collie Kennels, Lake Ronkonkoma, Long Island, N.Y.

IRISH SETTER PUPPIES

Beautiful aristocratic Irish Setter Puppies for sale, whelped in April. Registered.

WALTER McROBERTS

1210 Knoxville St. Peoria, Ill.
(Member Irish Setter Club of America)

IRISH TERRIER PUPPIES

of both sexes. All from the very best stock.

For particulars address

CLOVERLY KENNELS

West Chester,

Penna.

Russian Wolfhounds

The Best Dog in the world and one of the Rarest Breeds extant. Peerless in beauty and reliability of disposition. Companions for gentlemen, ladies or children.

CATALOGUE "H"

Mirasol Kennels

Pasadena, California



VALUABLE DOG FOR SALE

AIREDALE TERRIER, "Colne, The Favorite," A. K. C., 143,235. Eighteen months old, weighs 50 lbs. A wonderfully bred one, by Midland Rollo, by Ch. Midland Royal. Born and bred in England and won there the only time shown; a good guard and watch dog, safe with children, just the dog for a country home. Best price \$100.

Write for complete pedigree, description, etc.
Frank A. Eyth, 251 So. Main St., Butler Pa.

Hunt Big Game

Don't hesitate because inexperienced. Go this year, while there are still a few places left where you will see game that has never been hunted and have your hunting all to yourself. I can show you Mountain Sheep, Caribou, Moose, Grizzly Bears, in a country where no other white man has ever been and the game has not become dwarfed from the conditions which always arise after hunting is started. I make all arrangements, and personally manage expedition, preserve trophies, etc., as hunter companion; advise as to purchase of fire-arms and cameras and give instruction in shooting and wild game photography. References

Address:— C. T. S.

Care of House & Garden

little fellow, say, smaller than a fox terrier, reduce this prescribed dose by half. The skin is the surest indication of the dog's condition, and if it feels burning and feverish the above method of treatment should be resorted to. If the normal condition does not return you must look for the symptoms of some of the summer complaints to which the dog is subject.

Indigestible food, tainted water, too much green food, dirty kennels or a number of allied causes may result in diarrhoea. Prevention is the safest and best cure and works in keeping garbage, decaying animal matter and spoiled or stale food out of the dog's way. Small doses of castor oil will give relief. If the animal appears to be in pain give very small doses of laudanum.

If fleas or any other parasites attack, be quick to give the dog your assistance, as he suffers cruelly in this weather. If you are partial to a powder remedy be sure to use it out on the lawn, as it often simply drives the fleas away from the animal without killing them, and they are unwelcome visitors.

Fits or convulsions, the bane of the puppy's life in summer, are often blamable to the master. Teasing, mauling and fondling during excessive heat are provocative of attacks. But fits are not necessarily fatal, and they certainly do not require shooting. Rest and quiet will do more to cure your dog than a thousand nostrums. Handle him as little and in as gentle a manner as possible. Simply see that he does not hurt himself. Keep him in a cool, darkened room and when he has ceased to tremble and is relaxed, dose with from 2 to 20 grains of potassium bromide in camphor water. Keep this up for a few days and give a very light diet—some say a milk food only.

We can order different foods for ourselves when the thermometer goes up, but the dog must take what he gets. His diet demands a change in summer as well as his master's. Don't keep on giving fat and heating foods and expect your dog to be healthy. After experimenting at a well-known kennel, a diet the main part of which was rice proved the most efficacious for hot weather. The rice was well cooked in a double boiler and mixed with either milk, buttermilk, soup or soup meat. It must be thoroughly cooked or skin troubles result. In the latter part of August cooked rolled oats mixed with equal parts of rice and hominy worked well, as the small amount of corn meal seems very beneficial if perfectly cooked. Give these things a little of your attention; see that the dog's meat is sweet and clean and his food properly cooked or you don't deserve to own him.

In general then, give a little care to your dog during the summer; he deserves it. Don't let him be mauled and hauled or made to run and play when he is hot. Give him a vacation too, he'll repay you in the cool weather, when he can romp and play without any of the ill effects.

ARTHUR W. DEAN

HAVE MUNSON-WHITAKER CO ATTEND YOUR TREES

"WHAT for," you ask. "As a matter of preservation," we answer. "But my trees are all right," you reply, "so why go to any expense about them?"

"Simply because they look all right does not prove they are all right," is our answer. "Only a careful inspection such as we give, can prove that."

In that terrific storm which swept over so many states this June, the number of trees with shattered limbs and split down trunks was most conclusive evidence that a tree's weakness is not apparent to the casual observer.

Of the hundreds of trees which we were called upon to repair, as a result of that storm, a surprising number we found were being riddled by leopard moths.

These insects bore into big limbs in such a way that they at once seriously weakened them besides leaving numerous open doors for rapid decay to enter. Many a fine old tree was totally destroyed by that storm simply because its trunk was so riddled it could not stand the strain. Yet in most cases its true condition was a complete surprise to



This is the leopard moth that lays its eggs in your finest trees.



And this is a life size pupa that develops from those eggs.



And this is an example of the results of the leopard moth. It takes two whole years of live wood eating to satisfy his appetite.

The Leopard Moth

the owner. By far the larger number of those trees could have been saved by giving them the prompt attention which one of our inspections would have revealed to be necessary. The cost of such repairs certainly seems trivial in comparison to having your trees permanently disfigured or totally destroyed.

The care of trees is our sole business, and has been for years. If you value your trees and want to make sure of their sound condition—send for one of our inspectors. Glad to mail you our booklet—"Trees—The Care They Should Have."



Munson-Whitaker Company FORESTERS

Boston—623 Tremont Bldg. New York—823 Fourth Ave. Bldg.
Chicago—303 Monadnock Bldg.

NO DELAY TO GET THE CLOTHES DRY ON WASH DAY



When using the "CHICAGO-FRANCIS" Combined Clothes Dryer and Laundry Stove. Clothes are dried without extra expense, as the waste heat from the laundry stove dries the clothes. Can furnish stove suitable for burning wood, coal or gas. Dries the clothes as perfectly as sunshine. Especially adapted for use in Residences, Apartment Buildings and Institutions. All Dryers are built to order in various sizes and can be made to fit almost any laundry room. Write today for descriptive circular and our handsomely illustrated No. 12 catalog. Address nearest office.

CHICAGO DRYER CO. OR SHANNON MFG. CO.

630 So. Wabash Ave., CHICAGO, ILL.

124 Lexington Ave., NEW YORK CITY

Art and Progress

A MONTHLY ILLUSTRATED MAGAZINE

PUBLISHED BY

THE AMERICAN FEDERATION OF ARTS

1741 NEW YORK AVENUE, WASHINGTON, D. C.

**BEAUTIFUL ILLUSTRATIONS
THE BEST WRITERS
SPECIAL FEATURES**

A Layman's Magazine of Art upheld to a professional standard. It treats of Painting, Sculpture, Architecture, Civic Art, Landscape Gardening, the Handicrafts.

Sample Copies, 10 cents

Subscription Price, \$1.50 a Year

Kelsey Fresh Air Heating

FOR THAT NEW HOUSE OF YOURS

If you want FRESH AIR, GOOD VENTILATION, HEALTHFUL AND ECONOMICAL HEATING; and a heating plant that's easy to manage and is recommended by thousands of HOME OWNERS WHO INVESTIGATED AND INSTALLED IN PREFERENCE TO ANY OTHER SYSTEM without regard to the question of cost, you will give careful consideration to the



Residence of Chas. F. Leland, Southborg, Mass.
Heated and Ventilated by the Kelsey System.
James Pardon, Architect, Boston, Mass.

KELSEY WARM AIR GENERATOR

No matter whether your house may have 5 rooms or 50 or more rooms, there's an abundance of evidence from the users that the KELSEY SYSTEM WILL HEAT EVERY ROOM EVENLY AND UNIFORMLY WITH FRESH AIR THAT HAS BEEN PROPERLY WARMED, AND WILL DO IT WITH LESS COST FOR FUEL, MANAGEMENT AND REPAIRS, THAN ANY OTHER SYSTEM.

FOR VERY LARGE RESIDENCES the Kelsey Mechanical (Fan) System effects a complete change of air all through the house every ten or fifteen minutes, if so desired.

YOU WILL SOLVE THE HEATING QUESTION if you'll only INVESTIGATE and send for the free Kelsey booklets which clearly explain WHY Kelsey Heating gives the very best results, without the use of steam or hot water pipes and unsightly radiators which warm the same stagnant, unhealthful air over and over.

KELSEY HEATING COMPANY

Main Office: 56 East Fayette St., SYRACUSE, N. Y.

New York Office: 164C FIFTH AVENUE

Vitralite

The Long Life WHITE ENAMEL



WHEN you plan a beautiful colonial entrance, tell your architect or painter to "Use Vitralite to make it white." Vitralite never discolours, never cracks like ordinary enamels, but gives a full, rich, porcelain-like gloss that remains. It flows easily, dries hard and smooth without trace of brush mark or lap. You can use it on all surfaces, indoors or out, on wood, plaster or metal. It

forms an absolutely opaque covering on all surfaces; you can make anything just pure white.

Vitralite is but one of the 300 Pratt & Lambert products typified by the famous "61" Floor Varnish, that durable, tough coating that makes floors mar-proof, water-proof, heel-proof.

Read for Free Sample Panel Finished with "61" and test it. Ask for "The Finished Floor"—tells how to finish and care for floors. If you are building or decorating send the name of architect and painter and ask for our booklet, "Decorative Interior Finishing," a valuable guide to decorating the home. If your dealer can not supply the "P & L" Varnish you want send to 117 Tonawanda St., Buffalo, N.Y. In Canada, 61 Courtwright St., Bridgeburg, Ontario.

"61"

FLOOR VARNISH

PRATT & LAMBERT VARNISHES

AMERICAN FACTORIES: NEW YORK, BUFFALO, CHICAGO, BRIDGEBURG, CANADA. ESTABLISHED 62 YEARS. FOREIGN FACTORIES: LONDON, PARIS, MUMBAI.

Lest You Forget

about those TREES, EVERGREENS and SHRUBS you intended planting.

AUGUST, SEPTEMBER and OCTOBER are the best coming months to plant in.

WE OFFER SOME MORE

Bargains at Half Regular Prices

Large Box Trees
Large Blue Spruce
Rhododendrons
Lilacs
German Iris

Paeonies
Hardy Vines
Large Fruit Trees
Hardy Roses
and many other varieties

Special Half-Price Bargain List
mailed free on application.

Rose Hill Nurseries

NEW ROCHELLE, N. Y.

Please mention House and Garden.

CONTENTS

AUGUST - 1911

COVER DESIGN: A MIDSUMMER AFTERNOON
 CONTENTS DESIGN: EVERGREENS
 FRONTISPIECE: "PROCESSIONAL"
Photograph by Ella M. Boulton

WATER FEATURES ON THE COUNTRY PLACE.....	83
<i>By Grace Tabor</i>	
THE DECORATIVE POSSIBILITIES OF ROOFING.....	87
<i>By Harold Donaldson Eberlein</i>	
GETTING ACQUAINTED WITH THE AUGUST FLOWERS AND SHRUBS....	90
<i>By Henry H. Saylor</i>	
THE TREND OF MODERN FURNITURE.....	93
<i>By Waldo Campbell Hibbs</i>	
BRINGING WILD FLOWERS INTO THE GARDEN.....	95
<i>By Florence Beckwith</i>	
FIGHTING THE DROUGHT IN THE SMALL GARDEN.....	98
<i>By F. F. Rockwell</i>	

UTILIZING THE WASTE SPACES OF A HOUSE.....	100
<i>By Louise Shrimpton</i>	
THE ARRANGEMENT OF CUT FLOWERS.....	102
<i>By Laura Balch Carpenter</i>	
THE FOUR BEST EVERGREENS.....	105
<i>By Arthur Herrington</i>	
MAKING A GARDEN ON A HILLTOP.....	108
<i>By Flora Lewis Marble</i>	
SUMMER FERNS FOR INDOORS.....	110
<i>By G. A. Woolson</i>	
THE HOME OF MR. H. D. COREY, NEWTON, MASS.....	112
<i>Chapman & Frazer, architects</i>	

INSIDE THE HOUSE.....	114
Some Suggestions for Old Jars	Electrical Helps
A New Jardinière	
GARDEN SUGGESTIONS AND QUERIES.....	116
American-Spanish Pimientos	Plant Evergreens Now
Bulbs for Spring Blooming	
EDITORIAL PAGE.....	118
The House Fly	The Dog in Hot Weather
Gathering and Storing Kitchen Herbs	
The Garden on the Small Place	
The Best Colony House for Poultry	

VOL. XX, No. 2.

HENRY H. SAYLOR, EDITOR.
 Copyright, 1911, by McBride, Winston & Co.

McBRIDE, WINSTON & CO., 449 FOURTH AVENUE, NEW YORK CITY
 Robert M. McBride, President; Robert F. MacClelland, Secretary; Henry H. Saylor, Treasurer. Published
 Monthly. 25 cents per Copy. \$3.00 per Year. For Foreign Postage, add \$1.00; Canadian, 50c. Entered as
 Second-class matter at the Post-office, New York, N. Y.



When one considers the beauty and refreshing suggestion of coolness that a water feature gives to a country or suburban home, it is amazing to find how few people take advantages of their opportunities along these lines. You may perhaps be cramped for sufficient room to make a swimming pool, but there is no place too small for a lily-pool or a bird-bath



Water Features on the Country Place

THE DESIRABILITY OF SOME SORT OF A POOL IN THE GARDEN OF SMALL SIZE AS WELL AS ON THE GREAT ESTATE—PRACTICAL DETAILS OF INSTALLATION AND CARE

BY GRACE TABOR

Photographs by N. R. Graves, M. H. Northend and others

TAKE it whichever way we may—seriously or as a plaything—water, in the intimacy of the garden, is a constant delight. Yonder by the rambler as I write a big, sleek catbird is drinking at the concrete basin—a basin of crudest home construction, made from some “left-over” building materials that would otherwise have been thrown away. And here, breathless from the vain pursuit around the lawn of a distracting big butterfly, comes the dog, to stand up and lap greedily.

How they all enjoy it! And how pleasant it is to see things enjoyed. Hardly five minutes of the day passes without a swift flutter of wings toward the bath, a busy hopping about on the stones which give the water its varying depths, and a glad dipping deep of little bills and a lifting high of little heads, with lingering appreciation. And in the early morning, what a gathering for ablutions; what splashing and sparkling in the sunlight—all for fifty cents worth of cement, a little ingenuity and a daily pail of water brought out and poured in.

It is a far cry from a bird-bath of this kind to the great water garden—but there are possibilities for all tastes, situations and resources at every step, all along the way. And “water, water everywhere” almost for no effort at all. Even a fairly large pool is perfectly feasible without either supply or drain pipes, if the work of pumping it out is not too much to undertake, when occasion demands; for a hose will fill it and keep it at the required level all summer, goldfish will prevent mosquitoes from breeding in it, and sub-aquatic plants like the giant water weed (*Anacharis Canadensis*) or eel grass (*Vallisneria*



Fortunate indeed is the man who may have a pond of some extent and its adjoining moist borders for the irises and other water-loving plants

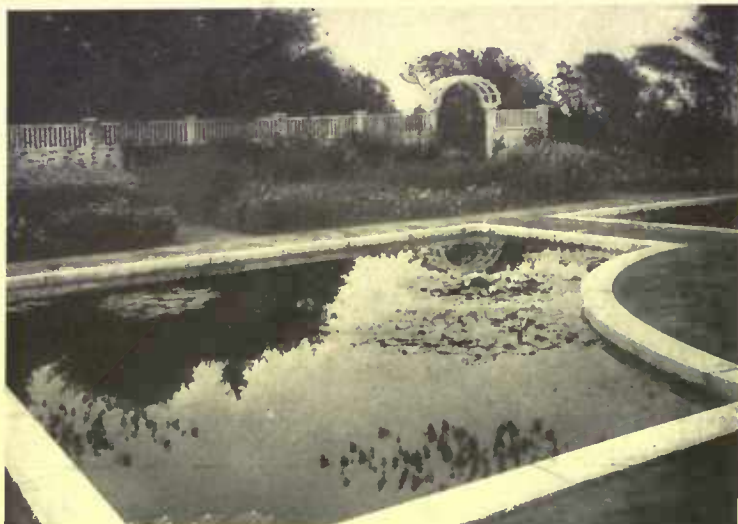
spiralis) will aerate the water and keep it sweet, and its own overflow will water the iris that naturally will be nearby.

There are three things which make or mar the success of any pool. These are its location; its form and immediate surroundings; and the plants which occupy it, if plants do occupy it. A pool too thickly planted is like no pool at all, so far as effect is concerned, for the water is invisible. Never less than two-thirds of the total water surface should be exposed.

For this reason a very small pool should either not be planted at all, save on its margin with grass or iris perhaps; or else it should be planted with only one small water plant—a water lily like *Nymphaea pygmaea*—or stocked with a floating plant which may be kept within bounds very easily by simply taking some out whenever it is necessary. The water chestnut or water caltrops *Trapa natans*, which bears white flowers, is one of these; water hyacinth—(*Eichornia crassipes*—*E. speciosa* according to some dealers)—is another. This, by the way, is the famous “million dollar weed” of the St. Johns river in Florida, where it obstructs navigation. It has blue hyacinth-like flowers. Still another attractive floating plant—attractive in foliage though it has no flowers—is

Salvinia Brasiliensis. All three of these are annuals, but a clump may be carried over indoors during the winter, in an aquarium or a jardinière.

The form and immediate surroundings of an artificial pool will depend of course upon the plan of the garden which it is to



An excellent illustration of a vital principle in planning water features—the pools in form and inter-relation are treated just as flower beds are in the formal garden



The two octagonal pools flanking the entrance path are as yet unfinished. A naturalistic edging would be out of place here



With a flowing stream the possibilities for softening the edges with reedy grasses and bog-loving lilies are unbounded

occupy. Under some circumstances in even a small garden the most delightful results may follow a cunningly contrived naturalness, but these circumstances are not common. Where they do exist, however, it is decidedly well to take advantage of them, for the unusualness of the garden then becomes one of its great charms. Pockets among rocks, suggestive of the pools which springs form, are perhaps the most successful arrangement along natural lines which can be undertaken on a small place—but this should never be undertaken unless the rock formation is natural to start with. A receptacle for water may be made, where it is, of concrete worked in among the stones according to the requirements of their positions. All signs of this, however, must of course be hidden by naturally arranged stones which shall cover its margins—and little pockets of earth among these should furnish foothold for moisture-loving, rock-loving plants.

Such a pool is of course not suitable for water lilies, for its natural location is at least part in shadow, while all-water plants demand the fullest exposure to the sun. But it forms a charming focussing point for a garden walk, and the birds and beasts will enjoy it to the full. Indeed it seems the natural accompaniment to the true rockery. The inside of such a pool, by the way, should correspond to the stony forms around it and not be a plainly rounded basin. Rocks and stones laid on the bottom will carry out the illusion if they vary sufficiently in size and shape, and the bottom itself may be worked by hand into a perfect simulation of natural formation.

But where a pool is desired on what would otherwise be an open lawn, it must be a part of some definite, formal design. Otherwise it is far better not to have it at all. It is obviously artificial—and anything that is obviously artificial must have in itself sufficient beauty of form and line to be its own excuse for being. The artificial things which have not are the abominations of the earth. This is not to say that such a design need be elaborate, however, but it must be *definite*.

The form of such a pool will of course depend upon the general garden design, and upon its place in it; and the design itself will in turn depend upon the area which is to be given over to it—so it is not possible to more than generalize when it comes to the matter of form for basins. Generally speaking, however, the form that seems to lend itself to all situations most readily, and to afford at the same time the most advantageous planting area,

is the lengthened quadrangle with half-circle ends, this half-circle being described with a radius which is a little less than half the width of the quadrangle. This requires ordinarily a general garden plan which is longer one way than the other. Such a plan is usually possible, and always advisable when possible.

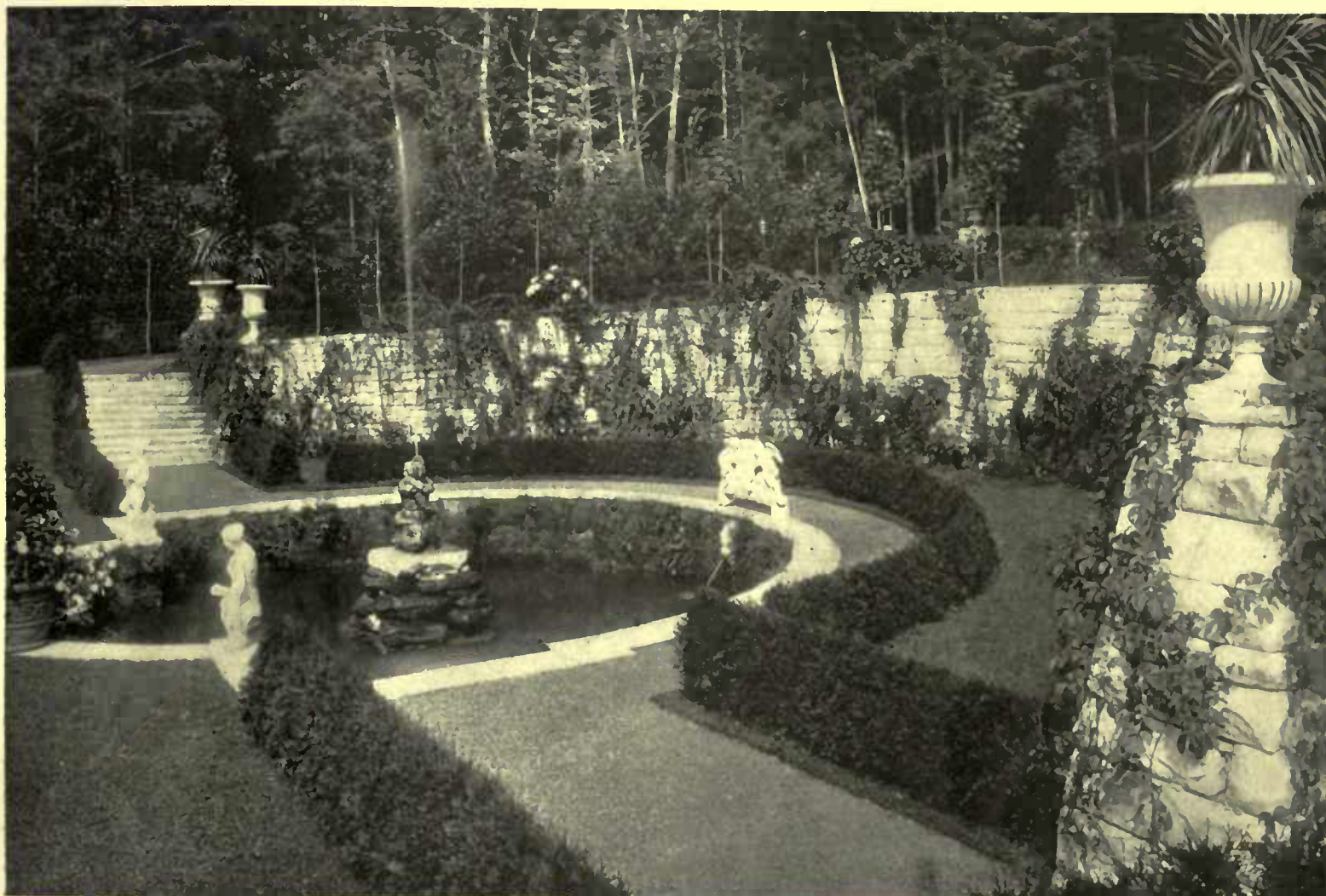
For the square garden the square pool, the round pool and the modified square, with its sides incurved, are practically the only available shapes. Very often the design for such a space, however, may be laid out along one axis in a way that will suggest the oblong; where this is done the pool need not necessarily be limited to these forms, but may be a crescent form, the half of a circle, or any simple shape that lends itself to the lines of the design.

In the water garden illustrated at the top of the page the shape of the pools is determined by the design absolutely, just as the shape of the beds in a formal garden would be determined; and rarely

is anything more beautiful than this form of garden to be found.

The location of a pool is, after all, the crucial thing which must determine its form and everything about it. If its place is to be among natural conditions, make it natural; but unless it can be absolutely natural in every respect—in its surroundings as well as in itself and its planting—treat it formally and as a part of a composition. Every body of water should be dealt with

often helps to this end very successfully. Where such an area exists, excavation may be all that is needed to turn it into a pool. But where there is neither a stream nor a bog, artificial construction with water piped from the nearest source may of course be resorted to. Here, and here alone, is the "natural" form permissible in artificial construction on a large scale, because here all the surrounding conditions are naturalistic. But to be a suc-



The distinctly formal garden can hardly be counted complete without its pool and fountain. In the garden of Bellefontaine at Lenox, Mass. Carrere & Hastings, architects

according to this standard, from the smallest pool occupying a dooryard-garden up to the most pretentious. Never place even a tiny basin *aimlessly* in the midst of open lawn, for located thus its meaning is lost completely, whereas as the central feature—the leading note—of a garden composition, the tiniest pool takes on dignity and interest.

Attempts to make the form and appearance of a pool of this kind anything but formal are foredoomed to dismal failure, the result of such attempts being merely a meaningless irregularity that is a blatant discord in the harmony of outdoors—and that deceives no one. For irregularity, alone and by itself, is not nature by any means—and in any event the natural form belongs only to the natural environment. Where the garden affords this, the natural pool, artificially made on a fairly large scale, is of course delightful.

The simplest of these is acquired by the damming of a stream or brook, and this treatment of a watercourse, especially one that tends to dry out during summer, is always desirable. Where there is no watercourse, however, it is not so easy to indulge a fancy for a "natural" body of water, though a low, bog spot

cess it must be studied very carefully and worked out with great skill; nature is elusive.

The contours of the ground for a very great distance around must, in the first place, suggest it—that is, they must fall gently towards it from every direction—and the marginal growth must also be in keeping with it. Great attention must be paid to margins, too. Nowhere do we ever find a natural pond with a stiff and sharply defined margin *all around it*. There are gaps and breaks—interruptions in the marginal growth as well as interruptions in the open spaces that lead right down to the water's edge. Take note of these and plant accordingly—and never, under any circumstances, allow a line of stones or cement or any sort of building material to show at the edge of a pond that is not of formal design, formally placed. Copy Nature exactly—or else do not take her for a model at all. I would suggest finally that an artificial pool of such elaboration should not be undertaken until the cost, in every sense, has been well counted.

All pools should be in the open, if they are anything more than a basin among rocks—for the sun should shine upon the water and the sky reflect in it. Reflecting light, the water doubles



An inspiring and particularly well executed rock garden where there is absolutely no suggestion of artificiality

light and the consequent sense of cheer—all the brightness that a smile implies; reflecting shadow it doubles and intensifies it, bringing the gloom which shadows symbolize—which frowns indicate.

The mechanical essentials of all pools are of course that they be watertight and frost proof—two things not difficult to attain, though many do seem to fall short of them when they undertake to construct a water basin. Puddled clay is recommended by many, but it is not likely to be any cheaper than cement and concrete—and it is not easy to find someone who can handle it properly. Unless it is very thoroughly and carefully “puddled,” away it will go some fine day—and away goes the water, too.

The construction of a cement pool is practically the same under all circumstances, whatever the size and form determined upon. The two things which insure its stability and resistance are its floor below the frost line and its walls sloping out on the inside, as they rise. Two and a half feet down is the accepted depth of frost according to many builders, but for surety three feet is a better standard. This means an excavation three and a half feet deep, the size and shape of the proposed pool. A footing six inches in depth and as wide as the wall is to be at its base, of cement and broken stone, is first put down. Onto this the wall of brick, laid in cement, is placed, starting with a width of 8 to 12 inches at the bottom and sloping out, on the inside, to a width of from 4 to 6 inches at the top.

Pack the bottom with broken stone and cement to a depth of six inches, then plaster bottom and sides with at least one inch of Portland cement mortar, nicely smoothed down. Use one part of cement to three of sand. Dip or pump the water out in the fall and fill with leaves, tramping them down—and cover with boards or a coldframe sash. It is well, in severe climates, to bank over the margin also with the leaves, though this is hardly necessary unless it projects high above the ground.

Water lilies should always be planted in tubs or boxes and sunk into such a pool. Then they are easily removed in the winter or at any time, if necessary, and the water is kept very much cleaner than it can be when the earth is free on the bottom, to be

stirred up whenever anything disturbs it. If there is an outlet pipe, cover it with screening to keep the fish in as well as too prevent its being clogged. Two or three fish are sufficient for a pool the size of an ordinary tub, and this number may be increased proportionately. The fish spawn in June usually, and I have known a pair to stock a pond in a season. Some say that the old fish will eat the little ones, however, and recommend bringing the roots and stalks to which the eggs are attached, into the aquarium or a tub, and giving the little chaps a better chance for their lives by letting them grow to good size before putting them into the pool with the old fellows.

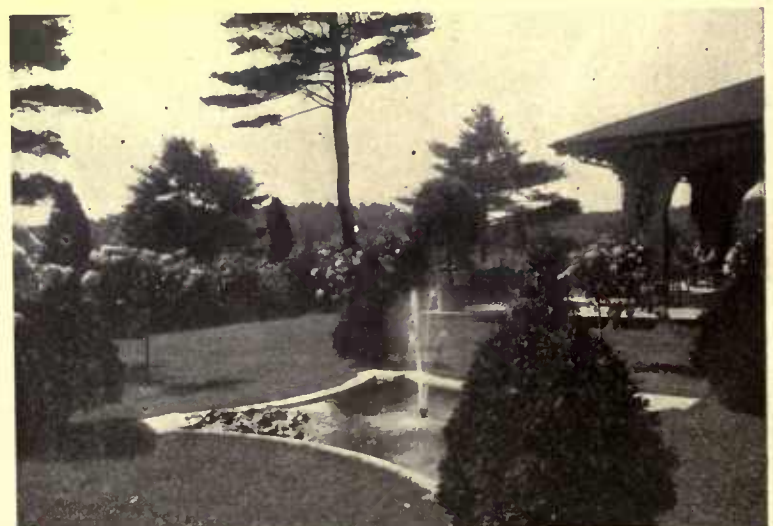
The soil for water lilies should be a compost of heavy loam mixed with one-third thoroughly decayed cow manure. Cover with an inch of good heavy sand. The boxes for them may be a foot deep and from one to three feet square, according to the size of the pool. In natural ponds larger boxes, four feet square and a foot and a half deep, are better; or the lilies may be planted in the natural mud bed.

Dormant rhizomes should be covered with only two or three inches of water until they have made their first floating leaf; then gradually increase the depth of the water as the plants grow, by lowering the box deeper into the pool. Water should always stand some time in the spring before the lilies are put into it, to warm up—and water for lilies must be still and of even temperature.

After the style of water garden has been decided upon, and the means of water supply chosen, there is still the important consideration of keeping the water fresh—not that the water has to be changed so very often, but a fresh supply should be constantly added to prevent stagnation. The various unpleasant forms of plant life which grow so quickly will be avoided in this way. Insect life, mosquitos especially, find breeding places in stagnant water and often make this form of garden more of a nuisance than a pleasure. Fish are one's best allies in destroying these pests.



If you attempt a naturalistic pool, follow Nature's models or the result will be most disappointing



An odd shape of lily pool and fountain as the central feature of a terrace of evergreens. A pool by itself on a lawn would be insignificant



There is a convincing charm in the perfectly simple roof. The ridge falls away on either side of the ridgepole and the slope is entirely unbroken by dormers. Chas. Barton Keen, architect



The solid line of windows breaking through the roof on the second floor is successful in that they appear to be part of the roof and the effect of a one-and-a-half story house is preserved

The Decorative Possibilities in Roofing

THE CANONS OF FORM AND DESIGN—THE DETERMINING FORCE OF STYLE IN MATERIALS, TEXTURE AND CONSTRUCTION

BY HAROLD DONALDSON EBERLEIN

Photographs by T. W. Sears, H. H. S. and others

WHEN one considers it roofs are, after all, nothing else than house hats. Smile at the conceit, if you will, but if windows are comparable to eyes and the surface of the walls to skin, surely there is no great impropriety in likening the covering of buildings to human headgear. There is just as much character, too, in roofs as there is in hats, only we are so accustomed to taking roofs as a matter of fact, from their very permanence, that we never think about it. And like hats, also, roofs by their pattern can either adorn or mar what is beneath them. A good roof may go far towards redeeming an otherwise indifferent structure, while a bad roof can spoil a building in other respects beyond all cavil. The roof may impart dignity and an aspect of substantial comfort and repose, or it may make everything look perky and obtrusive and contentious.

Of course a roof's first business is to afford shelter and protection to the dwellers within the house, but for aesthetic reasons—considerations every whit as necessary to civilized man's happiness as the more obviously material—it is equally as important that its outward appearance should comport with the walls that bear it

and the manners of the people it covers. It may be childish and because of residuary barbarism in our make-up, but, nevertheless, we do somewhat gauge a person's station by his headclothes. The distinguishing mark may be the prosperous banker's pot hat, the painted savage chieftain's eagle feathers braided in his hair, or the bishop's mitre, but a distinguishing mark it is, and we so regard it. Likewise, consciously or unconsciously, we judge a house's worth largely by its roof. The roof is recognized by architects as unquestionably one of the principal features in country house designing. It can and should be just as expressive of the character and purpose of the dwelling as any of its other component parts. Furthermore it has its own definite province in the ensemble that should be jealously guarded and not encroached upon by the other parts of the building.

By its texture and harmonious lines the roof is usually the most effectual medium of welding the house into the landscape. If it is a bald and staring roof with an uncompromising sky-line, we may be pretty sure that the house will always seem detached from its surroundings—in other words, a thing apart that



A felicitous arrangement of dormer windows so that the line and proportion of the roof are not disturbed. Light frames and casements are unobtrusive and do not destroy the balance



Great flanking double stone chimneys at each gable end of a Colonial house give an appearance of strength and solidity that diminishes the importance of the roof itself



The irregularity of the many additions to the English half-timbered houses breaks up the mass of the roof but does not destroy its unity



The Dutch gambrel-roof house, with its well proportioned slope and modest dormers, is worthy of sincere imitation in the small country or suburban place

will never look as though it really "belonged." Line and texture are the two factors of paramount importance in determining the architectural excellence of a roof, and it is only by closely heeding these that a successful result can be achieved.

No hard and fast rules can be laid down governing the planning of roofs, but adherence to certain general principles will avoid serious miscarriages and will ordinarily secure a satisfactory outcome. There may be a dozen different ways of solving the same problem and all of them thoroughly good. One of the chief privileges of the architect's profession lies in the large liberty of choice and the diversity of right ways for gaining the same end. Some peculiarity of local conditions may even cause the architect to cast general principles overboard and fly square in the face of all accepted traditions, and yet the outcome will be highly pleasing, all of which only goes to justify Sir Joshua Reynolds' dictum that art comes "by a kind of felicity and not by rule." Good

taste, and a sense of proportion and architectural propriety must be the ultimate arbiters in all cases. This applies as well to the layman as the professional. Architecture is not a thing of individual or private concern but a matter of social and public moment; to the force of educated lay taste and discrimination we must look for artistic betterment in our building and in no respect is this truer than with regard to roofs. The urging to lay selection, however, does not contemplate license, after the owner's wishes have been clearly stated, to hector and hamper the architect with all manner of whimsical restrictions and suggestions. It is worth while to select a competent architect, explain your wishes and then trust him.

In planning our roofs the prime characteristics to be aimed at are simplicity, congruity and due proportion. Observance of the general principles implied in the effort for these qualities, and such others as they connote, will at least safeguard us from "groping experiments and detached eclecticism." Combined with purity of line nothing can be more convincing than absolute simplicity. The simplest form of roof (next to the flat and lean-to) is the span or ridge, falling away on each side of the ridgepole, the pitch of the sides being determined by taste or convenience.

A striking example of the beauty of this style of roof intelligently used is shown in the first illustration. The slope is entirely unbroken by dormers and has a note of finality and staunchness and withal a Johnsonian downrightness that silences any oppos-



The hip roof on this old Virginia house avoids the effect of extreme width by the use of five narrow dormers. It is suggestive of strength and virility consistent with the hospitality of the time



The jerkin-head roof is not apt to be successful unless managed by very skillful hands, and is to be used when the conditions approximate those of its original environment



Slates of graduated size and thickness, varying in color, give unlimited possibilities for obtaining distinctive character in the appearance of the roof



The charm of the English cottage roofs is due to their unbroken surface. Note the difference between the lines of the slate and thatch

ing criticism before it can make itself heard. That roof is there for an unmistakable purpose. It shelters a household with a "roof-tree broad and high." More than that, it breathes a sense of homelikeness and is a tangible evidence that the good old word "roof" is synonymous with home and hospitality. In its breadth and sweep there seems to be the motherliness of a brooding hen with wings outspread over her young. Severe simplicity gives not a suggestion of austerity and the proportions are so well balanced that the bearing walls appear quite sufficiently evident. From every point of view the house is dignified, restful and satisfying. And here just a word of practicality. The rather unusual height of the ridge gives ample air space and assures a minimum temperature in summer in the sleeping rooms. There is room, too, for both an attic and a cockloft, which latter old Dr. Johnson defines as "the room above the attic" quite forgetting that he has already committed himself to the statement that the attic "is the topmost room in the house."

While speaking of the height of ridges, a word of caution will not be amiss about the angles of roofs that they be neither too steep nor too squat for the structures they are meant to surmount. A nice sense of congruity must direct the designer in this matter. What would be highly suitable in one case would be egregiously hideous in another, showing plainly that the roof as well as the other parts of a building must be carefully planned to meet the requirements of each individual case. A roof suitable to one

house cannot be adapted to another house of similar style without doing violence to the principles of proportion, while the divorcing of a roof from the architectural type to which it belongs, and clapping it on another with which it has no connection, is almost too reprehensible for words. Each type has been evolved in the course of years under its own peculiar conditions and along with it, as an integral part, has grown up its particular kind of roof. A great collection of gables on a Colonial mansion would be as incongruous as Julius Caesar in a tunic and toga with a beaver tile on his head, and a mansard on an old Dutch farmhouse would be manifestly absurd. And yet we sometimes see such things. In remodeling and alterations architects often accomplish some of their best work by changing the angles and shapes of roofs and reconciling previous incongruities. Unfortunately, too, it must be admitted that the inexpert sometimes work their

(Continued on page 120)



The spasmodic sky-line and confusing angles of this collection of buildings may serve as an example of what not to do when planning a new building if unity and repose are to be obtained



The softness and flexibility of the thatch roof is sometimes simulated to advantage by laying shingles with varying but narrow spaces exposed to the weather. Albro & Lindeberg, architects



Learn to know the improved varieties of annual asters, such as this quilled form, Daybreak

Getting Acquainted With the August Flowers and Shrubs

INTRODUCING THE BEGINNER TO THE MORE IMPORTANT OF THE ANNUALS, PERENNIALS AND SHRUBS BEGINNING TO BLOOM THIS MONTH

BY HENRY H. SAYLOR

Photographs by Nathan R. Graves, Charles Jones, the author and others



Pink Beauty, an aster of exquisite color. Plan to use asters for bare spots of the border between perennials

IN the July issue I undertook to show that the shortest road to a successful garden of flowers lies not through the alluring pages of the seedmen's catalogues, but rather through the amateur's own note book, compiled this summer. The man who postpones making the acquaintance of the more important garden favorites until next February when the spring seed catalogues begin to arrive has lost a year. With nothing but confusing names and a few illustrations to guide his choice, the resulting order list will necessarily be an envious document indeed. And the bloom in his next year's garden will surely be a disappointment, excepting to the true optimist. Most of the annuals he selects will produce results, of course, providing his enthusiasm and his hoe does not lag, but the color combinations and the arrangement according to height will surely reveal the evanescent character of his gardening knowledge. And, worst of all, there will be no perennials, in all likelihood, to carry forward the garden's existence into another year. On the other hand, if the novice will systematically undertake to familiarize himself with the garden's elements this summer, when he may see the various plants and shrubs in bloom, noting their character of growth, height, color, flowering period, whether they prefer sun or shade, or a little of both, planting time for seeds, bulbs or roots and so on, he will save at least one and probably two full years in his gardening apprenticeship.

Occasional visits to neighboring gardens and if possible to a nearby nursery will bring a working basis of knowledge concern-

ing many of the plants that brighten with bloom the months of June and July, and are only now fading, as well as concerning other plants that have last month or just now come into flower.

Many of these—the most dependable for the garden's enduring character—the beginner will find to be perennial in habit, re-appearing year after year from the roots. These may in most cases be started from seed this month. Many of them germinate slowly and then only under favorable conditions where they may be carefully attended. A seed-bed, either in the open garden or in a cold frame, where the soil has been prepared with a surface as fine and smooth as persistent raking can make it, and where the seedlings may be sheltered from a too hot sun by a cheesecloth screen or raised whitewashed sash, will be necessary if you aspire to raise your own plants.

Or, many of the perennials you want may be obtained already grown and set out this fall or after their blooming season, in time to become well established in their new situations before cold weather sends them to their winter's sleep. In the event of your raising a successful crop of seedlings these too must be transplanted to their permanent places in time to make a good root growth before hard frosts.

If you will do either of these things your next year's garden will need no apology for lack of bloom or bare spots where "things didn't come up."

Space will permit of the briefest mention of most of those plants that come into bloom this month in the latitude of New



Make the acquaintance of the French marigolds, with their yellowish to reddish-brown flowers growing one foot high



You will need no introduction to the native New England asters. Try planting a clump of them with golden rod



Mammoth White cosmos. You must start the seeds early indoors in the spring to get much bloom before frosts



Rudbeckia speciosa is of the same family as golden glow, but a single flower and of lower growth



The Shirley poppy is a refined variety of the corn poppy, with wonderfully beautiful thin crinkled petals

York. It must be remembered that the blooming period varies by about a week with each one hundred miles, earlier south, later north.

PERENNIALS

BEE BALM, OSWEGO TEA, INDIAN PLUMES (*Monarda didyma*) is one of the best red-flowering herbs. In damp localities, such as beside a brook, you will be most likely to find its fragrant foliage, growing to a height of two and a half feet.

MOLDAVIAN BALM (*Dracocephalum Moldavicum*) is another moisture-loving plant, with small, short-lived blue flowers. It will be found thriving in a shaded, sandy loam, moderately rich.

HARDY BEGONIA (*B. Evansiana*) is a tuberous-rooted plant producing rose pink flowers very freely. Not widely known but worthy of a more general cultivation.

GOLDEN GLOW (*Rudbeckia laciniata*) is common enough to need little searching for. It grows to a height of six feet and produces a wealth of clear yellow flowers (see illustration). Once established, it spreads by offsets of the root with amazing rapidity. A colony of it may be had for the asking from any of your gardening neighbors, and the roots may be divided and transplanted at any time. The red plant louse attacks it, but this pest may be kept in check by spraying the plants with soapy water.

PERENNIAL PEA (*Lathyrus latifolius*) is another tuberous-rooted plant—a rampant vine, with many flowers of a rosy magenta appearing in clusters. Improved varieties are obtainable in white, striped and deep purple.

PHLOX (*P. paniculata*) was mentioned in last month's list, as the earliest varieties appear late in July. Through this month and next do not fail to make the acquaintance of all the varieties you



You probably know these everlasting or straw flowers (*Helichrysum bracteatum*) of our grandmothers' gardens



And surely you know the sunflower, but do you know the perennial variety as well as the common annual?



Veronica or Speedwell is a dominant feature of the New Zealand landscape—long spikes of flowers in an intense blue

can find, noting the superiority of the pure whites, deep reds and salmon pinks. Phlox does best when the clumps are divided every third year.

ICELAND POPPY (*Papaver nudicaule*). As a perennial this splendid low-growing plant blooms in April, but as it is frequently treated as an annual the seed sown last spring will just now be producing its characteristic crinkled petals in yellow, orange and white.

SHOWY SEDUM (*S. spectabile*) is a splendid hardy succulent plant growing two feet high, with flowers rose to crimson, three or four inches across. It prefers a moist soil.

SNAP DRAGON (*Antirrhinum majus*) probably needs no introduction. Its curious trap-like flowers in red, purple and white appear in great abundance and keep well when cut.

DOUBLE PERENNIAL SUNFLOWER (*Helianthus multiflorus*, var. *plenus*) is another old standby that everyone should know. Lower in growth than the more common annual sunflower, it is one of the best large double-flowering plants for the beginner's garden.

VERONICA (*V. longifolia*, var. *subsessilis*) has a long season of bloom in this month and next, producing the longest spikes of any autumn flower, purple in color. Give it a deep, rich soil and full sun.

NATIVE PLANTS

NEW ENGLAND ASTERS (*A. Nova-Angliae*). No one who lives in Connecticut or the states adjoining it can possibly have remained in ignorance of this magnificent violet and purple flower of the late summer fields and roadsides. Particularly in combination with golden rod it is one of the grandest native flowers we have, and it is much improved under cultivation. Give it a

moist place in your garden—you may transplant it from the wild even when in bloom.

SWAMP ROSE MALLOW (*Hibiscus Moscheutos*), with rose or white flowers four inches across, is one of the best native plants for moist situations. It grows from three to seven feet in height.

SNEEZEWEED (*Helenum autumnale*) is another moisture-loving native, growing a foot or two tall with the best large yellow daisy-like flower



Scarlet sage or salvia is very common, but should be used sparingly and among white flowers in order not to make our gardens appear too hot

MOON FLOWER (*Ipomœa Bona-nox*) is a white-flowered rapid-growing vine. The large flowers open at night.

CORN POPPY (*Papaver Rhœas*), a self-sowing annual, growing somewhat less than two feet in height, with the characteristic delicate crinkled flowers of pink, white and scarlet. The Shirley poppies are refined varieties of it.

SCARLET SAGE (*Salvia splendens*), one of the most common scarlet flowering plants of suburban borders. Our gardens are cooler without it, although planted among white masses of flowers it often is necessary for the brilliant contrast it affords.

BULBS AND TUBERS

DAHLIAS (*D. variabilis*), mentioned last month, is probably the most important and varied of the summer-flowering tubers. Make the acquaintance of all the wonderful types and colors you can discover.

AUTUMN LILY (*Lilium speciosum*), one of the most dependable and easily grown of the glorious lily family. *L. rubrum* is the favorite form, a red lily

(Continued on page 124)



Golden glow is as luxuriant and easy to grow as a weed. Its six-foot height and double yellow flowers are very striking

which blooms late in the summer.

ANNUALS

COSMOS (*C. bipinnatus*) is the best of the tall late-flowering annuals. If not sown early its white, pink or red daisy-like flowers do not develop in time to make a showing before frost.

EVERLASTING (*Helichrysum bracteatum*), as nearly everyone knows, are the curious semi-double flowers of our grandmothers' gardens in yellow, dull crimson and white, that last indefinitely when cut and dried.

ANNUAL LARKSPUR (*Delphinium Ajacis*) will be found in many colors from white through pink to blue. It is lower in growth than the perennial sort, usually about eighteen inches high, and should be sown indoors in the fall for earlier bloom the following summer.

AFRICAN MARIGOLD (*Tagetes erecta*) needs no introduction, for its rich orange globular flowers and the pungent odor of its foliage are widely known. The French marigold is of lower growth (one foot) with darker foliage and yellowish to reddish brown flowers that are very useful for edging a border.



Stokes' aster or Stokesia is a foot-high perennial herb with blue flowers. The blooms are often over three inches across

The Trend of Modern Furniture

INTERESTING QUALITIES REVEALED BY A STUDY OF RECENT DESIGNS IN AMERICAN PRODUCTIONS—THE MODERN TURN TOWARD FURNITURE DESIGNS THAT COMBINES USEFULNESS, COMFORT AND ELEGANCE

BY WALDO CAMPBELL HIBBS

THE woman who was willing to put up with ugly furniture if it was restful and especially if it was supplemented by that one touch of "swellness," a gilt chair, should not have been laughed at. She was vaguely striving for comfort and elegance. The two are not incompatible, but her knowledge of good furnishing was vague.

There may be among us still little of that culture which permits admiration of a thing for its intrinsic value as an art or craft production, instead of for sentiment connected with it or the amount of gilt on it; and perhaps little knowledge of real assembling. However, as an ever-increasing offset against the desire of many for possessions that are considered to indicate only social standing, and are too often measured in quality by cost, there is the laudable ambition to have a thing worth having in furnishings if it be without question suitable to its environment.

In furniture each pure fashioning has its peculiar qualities, which should be understood as an aid to proper assembling. Choice of furniture for the home should be influenced by more than one's own liking. Without analysis, we may assume that the requisite of practicality is most important and the element of simplicity desirable.

We are no longer hampered by the egotism that evolved the monstrosities of what might be designated the "American" period in furniture. We still produce monstrosi-

ties. Yet, with a knowledge gained from true study and an earnest desire to produce furniture suited to the essentials of the American life of today, we have passed the beginning of a new period in which it might be said that American designers and makers of furniture rank among the best.

A number of conditions have contributed to practicability and simplicity in modern furniture and furnishing of a high class. Among them are the revolt from the burden of over-ornamented and too many household things, the evolution of the living-room as

against the little-used "parlor," and the growth of art influence in America, which has taken place during the last decade.

And it is just at this psychological moment, so to speak, that there appears in the furniture world a new phase, shown by the best American manufacturers, and already winning an assured position among purchasers of high-grade and artistic furniture.

The so-called mission style (in evolution considerably removed from its progenitors, the old California-mission pieces), has probably influenced this phase, principally in the qualities of simplicity and strength. But important in it is an application of old principles of practicality that made for the quaintness, distinction and beauty as shown in examples of the Hepplewhite-Shearer manner of the eighteenth century.

Mission and Hepple-



The so-called mission style has probably influenced this new phase in furniture, principally in the qualities of simplicity and strength which it advocates



Observe how the straight lines of these chairs are softened by the skillful use of curves at the most effective points in the design. Note the beauty of the splat



A thoroughly modern china-closet, yet possessing much of the charm of Georgian pieces. Its simple design makes it an admirable setting for the table service



Here is a rocker happily exemplifying one of the varieties of the new phase. Note the use of curves and the comfortable, loose cushion

white-Shearer in their best specimens are structural and logical. While not without ornamentation, there is in the latter no interference with line or strength; the best phase of the mission would seem to be without ornament. They are essentially straight-line styles. The one is construction-showing in its makeup the other almost modern in its joinery.

The new phase, however, has none of the vagaries of the evolution of the mission and its con-

quality may be secured in pieces by reliance not upon motives of decoration, but upon proportion. Such furniture has been successfully designed by architects simultaneously with the construction of buildings for corporation uses, notably banks, and for mansions. But the latter for the most part are furnished with reproductions and genuine old pieces; often, it is to be regretted, with too great freedom in the use of styles, but often, also, with great charm, where the scheme is carried out to the smallest detail.

Many of those who care greatly for it, do not advisedly become collectors of old furniture, if they are true to what they care for. One great difficulty in furnishing with the historic styles is that many require an environment in perfect sympathy with their design and construction in order to be successfully placed. The majority of those styles are non-suited, as being too individually marked, to the interiors of today. In truth they have no relation to the life of today, often, indeed, they may be classed among curiosities of a past age. They are therefore undesirable to hosts of lovers of good furniture.

Great numbers of Americans live in apartments or narrow city houses—so they would better have furniture which, while large enough for comfort, is yet compact in design and without protuberances in shape or excrescences in carving. Modern carving on anything but the highest class of productions is a delusion. Whatever one pays for in furnishing that is not either useful or at least truly decorative is apt to be wasted.

The new phase fulfills the requirements above indicated. The wood chosen is of handsomely figured mahogany, soft-finished in the best work. The pieces are individuals, with much handwork upon them, and excellent upholstery. The latter is often of the loose-cushion kind, with or without springs. It has long been un-

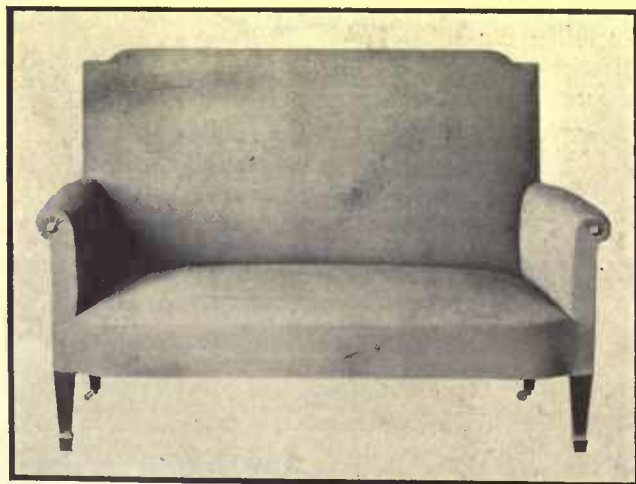


This delightful chair, the square-legged variety of the new phase, fits snugly into a space that a smaller curve-line chair would overlap

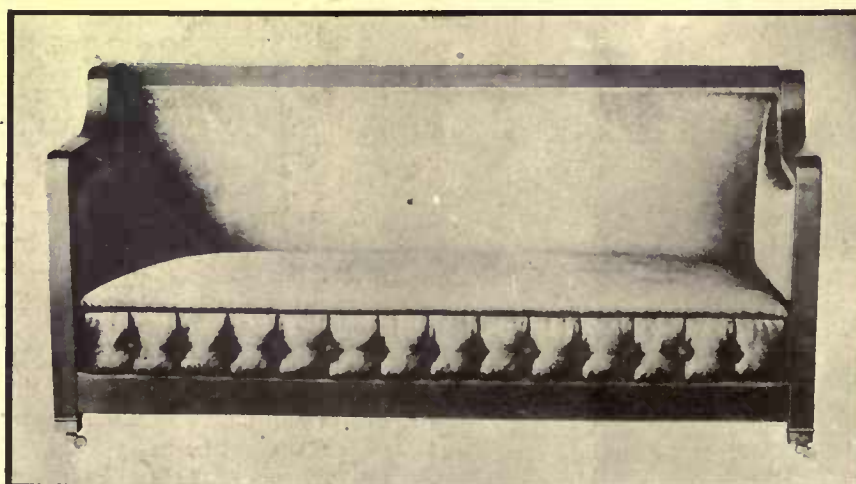
temporaries, or the inconsistencies of the conglomerates and "adaptations" of eighteenth century designs foisted upon the American home-maker as "colonial." Its designing and construction are the result of thought and skill. It has the certain firmness of the mission, as well as much of the grace of the Hepplewhite-Shearer.

Furniture has seldom borne so close a relation to interior architecture as the purist would desire. In America in our day this is particularly the case. But comparatively few American interiors have architectural quality. One reason is that the architect was for long an unknown quality in the designing of interiors, and the upholsterer took his place. The result has been the reduction to neutrality of most modern interiors; not to speak of the effeminization of the general rooms of the house. This is now being remedied in buildings of importance, and effort is being made to change conditions in dwellings of moderate cost.

Successful furniture, however, is not architectural in the sense generally understood by the layman, but structural. Corinthian columns are not suitable as legs of sofas, nor broken pediments for the backs of chairs. It is not enough to stick a few pressed-wood bowknots on a piece of furniture to make it fit a French period of architecture. True harmony in spirit and structure must there be to effect a proper relationship. Architectural



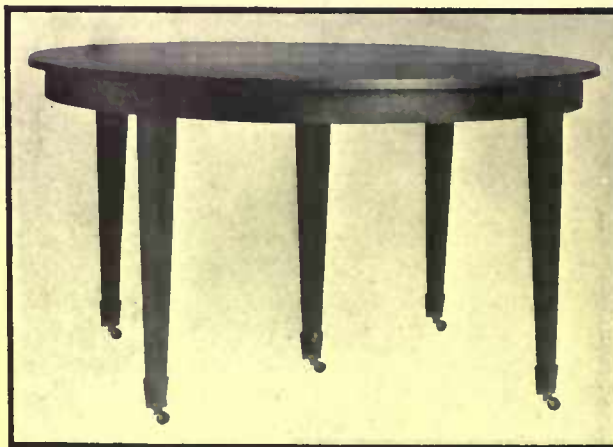
Beautiful in proportions, this sofa is deep-seated and high-backed. Some of these pieces have companion chairs. Only the best upholstery should be used



The davenport has won its way into the modern home. Observe the severe design relieved by the beautiful shoulders. Large, but comparatively easy to place in the room

derstood, notwithstanding the arguments of the decriers of upholstery, that good work of this kind makes for comfort as no other accessories of furniture-making do.

There is in this furniture the introduction of the subtle curves which rendered delightful the forms of eighteenth century pieces. One of the failures of modern designers is in the misapplication of the curve to straight-line structure. The proper use of the curve relieves this straight-line style of asceticism. Two kinds of supports are used, with due regard for the forms of the pieces—the taper and the taper-with-the-spade-foot, and the square leg. The spade foot was first used to give the assurance of strength to a slender leg, and the combination is of great beauty in finely designed furniture. The value of these forms of supports as space-savers is appreciated by the modern house-keeper, especially in the dining-room. In some individual pieces the effect is enhanced by structural cabinet mouldings of excellent proportions, and traditional reedings.



This piece, made with the ripest knowledge of how to make a practical dining-table, shows to advantage all the beauty of fine mahogany, placing no dependence upon carving or inlay. The camera slightly distorts the perspective

Suites of furniture, except when based on French formal assembling, are not frequently seen outside of hotel drawing-rooms, assembly-halls and official reception-rooms. The average householder is still under the influence of the supposedly artistic, no-two-pieces-of-a-style obsession, and photographs of interiors of better-class houses often show cabriole-legged Chippendale, spindle-legged Windsor, and modern willow, all gathered in helpless incongruity, in a strongly accentuated architectural setting. The furniture we have now become acquainted with, after inspection of its chief characteristics, and variants, seems to present itself as adaptable to many interiors, dignifying those of the humbler sort, admirably fitting

those in which finely proportioned and refined and simple designing has been made an important factor. The surroundings should in no instance be fussy. The possessors of those creators of atmosphere—old china, old plate, and old prints—need not hesitate to

(Continued on page 121)

Bringing Wild Flowers Into the Garden

THE VALUE OF WILD FLOWERS DOMESTICATED—WHAT VARIETIES TAKE WELL TO CULTIVATION—SOME SUGGESTIONS FOR THE NATURE LOVER'S GARDEN

BY FLORENCE BECKWITH

THERE is great danger that a large number of our native plants will, before many years, become entirely exterminated. In fact, in the vicinity of our large cities, many species have already become extinct. This is partly because of the destruction of our woods and forests which is constantly going on, and partly in consequence of the rapacity of those who wander into the country to gather flowers, and who not only pick every one they see but often pull the plants up by the roots.

True lovers of nature like to seek the wild flowers in their natural habitats, where those which we have known for years greet us like old friends whom we are always glad to see. But year by year we have to travel farther to find them, and often we cannot take the time to do this especially with the uncertainty of being able to find them after all our trouble; and, if we cannot go at just the right time, we miss them for the whole year.

Many species of wild flowers, however, take kindly to cultivation, and will abundantly repay the

trouble of transplanting them. In this way we not only save them from the danger of absolute extinction, but we can also have them close at hand to enjoy.

In nearly every yard or garden there is some nook in which the wild flowers will grow, and we have only to study them a little in their native haunts to determine which species will succeed best in the locations which we are able to give them. It is

often a great surprise to find how readily many species will adapt themselves to seemingly adverse conditions, thriving luxuriantly and blossoming abundantly.

The hepaticas take very kindly to cultivation, growing just as readily and vigorously in the garden as in the woods, and blooming just as freely. In fact, they seem to try to repay one for the trouble of cultivation by growing larger and sometimes doubling the number of their petals. In sunny spots the hepaticas will begin to bloom almost as soon as the snow goes off, and the blossoms are quite as attractive in their way as those of the trailing ar-



Hepaticas grow just as readily and vigorously in the garden as in the woods and well repay the trouble of transplanting

butus, which will not bear transplanting. The flowers vary in color from pure white to pink, purple and blue. The whole plant is charming, from the dainty blossoms to the downy new leaves, so carefully folded. The bunches increase in size and vigor as the years go on, and no wild plant better repays the trouble of transplanting.

Following closely upon the hepaticas, in fact often blooming at the same time in warm, sunny locations, come the trilliums. The large white blossoms of the *grandiflorum* are very beautiful, and, as the flowers grow older, their gradual change to various shades of pink makes an interesting study. The deep red blossoms of *Trillium erectum* make a fine contrast to the pure white flowers of *T. grandiflorum*.

All of the trilliums thrive under cultivation; the clumps grow larger every year and the blossoms also. The writer has a clump which has been growing in a garden for several years. It has increased from a single root to a large bunch and often bears over thirty blossoms at a time. When they are all open the plant is the pride of the garden, as much admired as the showiest cultivated flowers.

Mitella dyphylla, miterwort, or bishop's cap, is a dainty little white flower which will flourish in almost any shady nook. Its cousin, *Tiarella cordifolia*, the false miterwort, is one of the prettiest of our early spring flowers. The sprays of foam-like blossoms are airy and graceful and its leaves are particularly beautiful. It will grow contentedly in the garden year after year.

The bloodroot, *Sanguinaria Canadensis*, is well adapted to garden cultivation, and nothing can be more attractive than its pure white blossoms which come out in the earliest spring days. The veiny leaf is closely wrapped around the flower bud when it first appears, as if to protect it from the cold. The bloodroot increases rapidly and soon forms fine large clumps.

Nearly all species of violets will do well under cultivation, and nothing can be prettier in their place. They like a cool, shady location and if it be also a moist one, they will thank you and make the most barren spots beautiful with their clean, green leaves and cheerful flowers. Our most common blue violet, *Viola cucullata*, is one of the prettiest of all. A comparatively rare kind, a white form of *Viola sororia*, is splendidly adapted for growing

in shady places; its glossy green leaves completely cover the ground and its pure white blossoms are very attractive.

The wild ginger, *Asarum Canadense*, has beautiful softly pubescent leaves and curious dark brown flowers which lie close to the ground and often escape observation. It thrives vigorously under almost any conditions and well repays for transplanting.

One of the most graceful of our wild flowers is the columbine. It grows naturally in all sorts of places, sometimes clinging to the sides of steep cliffs dripping with water, and again flourishing among rocks and stones. The whole plant has a striking individuality and grace, and its brilliant coloring makes it a beautiful object in the garden. It requires little in the way of attention and care, and if the seedpods are kept cut off, it will blossom nearly all summer.

Uvularias, or bellworts, do extremely well under cultivation. The clumps increase in size every year



One really does not appreciate the beauty of the wild carrot until a closer acquaintanceship is established



The vivid coloring of the cardinal flower is unrivalled



The Lady's Slipper lends grace and beauty not surpassed by the carefully cultivated hothouse orchid

and throw up more and more stems of the pale yellow, gracefully drooping blossoms. The flowers seem to increase in size by cultivation and the plant becomes very ornamental.

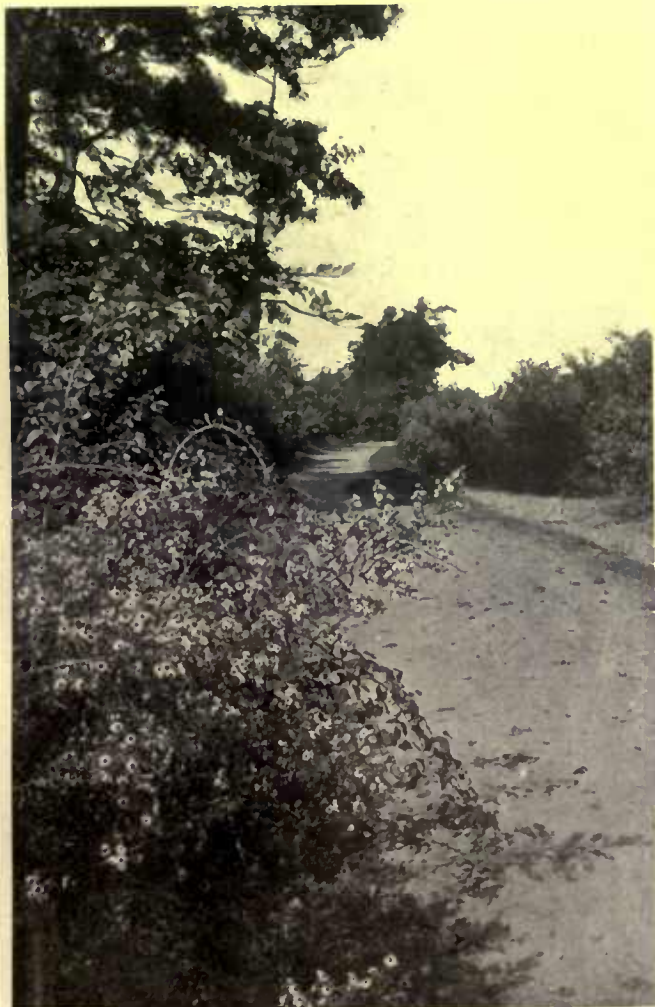
The cypripediums, or ladies' slippers, make regal ornaments of the wild garden. *C. spectabile*, the showy lady slipper with its large pink and white blossoms is the most beautiful of the family. It is most often found in swamps, but it also grows on sandy hillsides and it will flourish in the garden as well as in its natural habitat if watered enough to prevent the soil from drying on top. *Cypripedium pubescens*, the large yellow lady slipper, also does well under cultivation, even without particular care, and clumps of *C. parviflorum*, the smaller-flowered species, increase in size as they become established.

The blue flag, *Iris versicolor*, naturally grows in wet places, but it accommodates itself to circumstances nobly and will flourish in the wild garden and bloom for a month, if it only has occasional watering.

For vivid coloring no other wild



Black-eyed Susans grow larger and more ornamental each year in the friendly situation of the home grounds



Why import the Michaelmas daisy, which is only a variety of our wild aster cultivated abroad?



All the violets will thrive in the moist places so hard to fill

flower can compare with the cardinal flower, *Lobelia cardinalis*. It usually grows along streams, but it will flourish in the garden, especially if it be planted where a dash of water can be frequently given it. The cardinal flower begins to bloom in July, and the long spikes of brilliant blossoms will continue opening to the very tip, lasting until the latter part of August. Numerous side shoots spring out from the main stalk, thus lengthening the time of flowering.

The various species of wild asters accommodate themselves to garden privileges with no reluctance whatever; many of them are very graceful and pretty and they adorn the waste places where nothing else will flourish. Coming as they do late in the fall, they lengthen the season of bloom in the garden and are useful for decoration. Under the name of Michaelmas daisies, many of our native asters are cultivated in England and are often imported from that country for our gardens. But many of the same species can be picked up along our country roads without trouble and are quite as beautiful as their imported brethren. No prettier adornment can be found for the fall garden, and once introduced there they will take care of themselves.

The goldenrods will flourish in the town garden, but, for some reason, they do not seem to fit in with their surroundings quite as well as many other wild flowers. Possibly they need the environment of green fields to show them off to advantage. If you like the goldenrods, however, there is no reason why you should not have a large collection of them, for they have no objection whatever to being cultivated.

Rudbeckia hirta, the purple cone-flower, perhaps more generally known as Black-eyed Susan, is one of the gayest ornaments of the field, a universal favorite with old and young. Transplanted to the garden, it philosophically accepts the situation and responds to cultivation with cheerfulness and an apparent desire to improve its opportunities. The leaves of the plant become smoother and a brighter shade of green and the blossoms become larger. Once introduced into the garden it will perpetuate itself and become more plentiful and more ornamental every year.

Most of the wild flowers will do well if taken up when in bloom. This is fortunate, for some of them die down after blooming and it is almost

(Continued on page 129)

Fighting the Drought in the Small Garden

HOW TO CONDUCT A SUCCESSFUL CAMPAIGN AGAINST THE DRY SPELL—
THE BEST MEANS OF COMBINING CULTIVATION AND IRRIGATION

NOTWITHSTANDING all the damage done to our gardens, small and large, by insects and by plant diseases, there is another enemy whose devastations far surpass the ravages of all of these added together. Not that the actual destruction is more, for it is not—and for that reason the tremendous extent of the losses due to partial drought are seldom realized. To illustrate: if one sets out a hundred little cabbage plants, and the cut-worms get ten of them, and a clever, fat wood-chuck ten more, and the cabbage maggots still another ten, and the green caterpillars ruin an additional ten, one certainly would be justified in raising a cry about garden pests, for the total loss would be forty per cent. But the fact remains that the sixty plants spared, in a season of plentiful rain, would give a bigger crop than a full hundred plants in a dry season in which each plant attained only half its normal weight. (In this connection it must be remembered that a head of cabbage, or a melon or a squash, six inches in diameter, will weigh eight times as much as one three inches in diameter.) There is not one season in fifty that plants in the open garden get all the water they could use to advantage; and every day they go thirsty, even though it is not enough to “check” them, means a loss in crops at the end of the season. As this loss is not a visible one, it passes unnoticed, and we go on trusting to luck and the weather to send us the right conditions for growing big crops, and in the meantime have to use twice as much garden space, seed and time as would be necessary if we could give our plants all the water they could use.

Another reason why the importance of the water question is not realized is that few people understand that plants not only need drink, but that all their food must be taken up while held in solution in water. Thus it makes no difference how rich we may have made the soil, nor what tempting forms of plant-food we may have put into it, so long as there is not enough moisture in the ground to carry them up through the peculiar feeding system of the plant.

Important indeed is the part that water plays in the growing of plants, and where it is withheld to too great an extent the result is plainly apparent. But it is by the half-water-starved condition of the garden soil, in which the plants look well enough but do not seem to come on as they ought, that the extensive and tremendous damage is done.

What then can we do to fight the great invasion—drought?

Such measures as we may take are, of course, of two kinds—preventative and remedial; and they are, respectively: cultivation, special cultivation with drought fighting in mind, and irrigation.

Now the matter of proper cultivation has much more to do



Even in the small garden it is becoming more evidently necessary each year to provide against drought, if the best results are expected

BY F. F. ROCKWELL

Photographs by E. J. Hall and H. B. Fullerton

(3) that we must keep the water which does soak into the ground from rising again to the surface where sun and winds evaporate it with tremendous rapidity.

The first of these conditions is attained by frequent, thorough and deep plowing. The majority of garden soils cannot be plowed too deeply. (The few exceptions are light, sandy soils, lying on open sandy or gravelly subsoils, through which water runs quickly; such soils it is well to plow always at a uniform depth, and keep the subsoil as compact as possible).

It will, however, not do to try to plow ten or twelve inches deep on soil that has formerly been turned over to a depth of six or eight inches. If it is attempted, the top layer of the garden will be largely the cold, undisintegrated subsoil turned up from below and not favorable to luxuriant plant growth. A better way, if the time can be afforded, is to plow an inch or two deeper every time the piece is turned over. This leaves only a small amount of poorer soil mixed with the rich surface soil, which will be, if anything, a benefit, and it contains usually generous amounts of plant-foods (nitrogen, phosphoric acid and potash) in forms which will become gradually available. By this method, and plowing both spring and fall, two seasons will suffice to bring most any field to the desired depth.

If it is required to increase the depth of the soil at one plowing, the best way will be to plow as deep as possible—a strong team being necessary—and then add the manure and “cross plow” lightly, so that the newly upturned subsoil is thoroughly mixed through the upper four or five inches of soil. If this deep plowing leaves a remaining subsoil of a clayey nature, follow the regular plow with a “subsoil plow,” which turns a small furrow in the bottom of the regular furrow, but does not lift any soil to the surface, simply breaks it up where it lies so that the water may

with keeping moisture in the soil than most people imagine. There is not space here to go into the science of the matter in any great detail, but a hasty common-sense view will tell us that the water that falls passes from the soil in three ways; (1) part of it soaks or seeps through the open surface soil either down through a porous (sandy or gravelly) subsoil, or to a hard subsoil along which it runs to lower levels; (2) part of it runs off the surface, especially on sloping areas; and (3) part—and a large part—is drawn up from the soil into the air again by capillary attraction and evaporation. It therefore becomes evident that in our cultivation we must aim (1) to make the soil as deep and

as sponge-like, or moisture-holding, as possible in order that its storage capacity may be as great as possible; (2) that we must try to keep a mellow surface, into which rain will soak quickly where it falls; and

percolate down into it, and remain there, as in a vast shallow cistern, to be drawn upon when needed in the hot drought days.

All this may seem like a lot of detailed technical information, useless to the man with only a small vegetable garden, and a quarter of an acre of potatoes.

In proportion to the extent of his operations, it is just as important to him as to the man who raises crops by the acre. He will find it much less tiresome and expensive to insist on having his small garden properly plowed and prepared, and also much more effective, than to be driven to the necessity of lugging pails of water, evening after evening, and to sprinkling it about the surface of his garden, when there should be barrelsful stored at the bottom of it.

So much for the first step in preparing for the fight against drought. The second is deep harrowing. Too often the only thing accomplished in harrowing is to get the surface of the soil level and smooth enough to run the seed-drill in. The condition of the surface should not be thought of until the upper four or five inches of soil is thoroughly fined—pulverized until you can stick your hand down in it anywhere without encountering lumps. Generally speaking, the disk-harrow is best for this purpose. On certain soils, the "spading," "spike-tooth" or "spring tooth" types of harrow may be preferable—but the man who hires his work of this kind done for him is not likely to have much choice in the way of special implements. Whatever sort of harrow is used, the ground should be gone over until there are no lumps or clods, and all is fine and mellow. The importance of this work, as far as drought-fighting is concerned, is that there shall not be crevices and air pockets left to aid in drying out the upper layer of soil, and to prevent the formation of the important "dust-mulch" of which more is said later on.

The third step, of course, is the fining of the surface, for which some form of smoothing-harrow, or a brush drag, is used. The surface should be left as near the condition of ashes as possible,—the finer the better, provided the ground is not gone over so frequently as to pack it down hard, for we have already seen the importance of having a soil through which water will soak quickly. The finishing touches are usually given with the garden rake. (It is of importance that the piece be planted as soon as this final working-over is given, and while the surface is still fresh and moist.)

That answers for the preparation of the land—deep plowing, deep harrowing and fine finishing. But the condition of the land has also a great deal to do with the matter. It should be in that shape which tillers of the soil are wont to term "in good heart," that is, besides being rich, it must contain an abundance of humus,—a condition which to the uninitiated may perhaps best be illustrated by the difference between a piece of silk and a piece of flannel, as regards their capacity for absorbing water. Soil containing plenty of humus will absorb water like a sponge; soil deficient in humus will pack and get muddy, and then get lumpy and bake. Thus all important humus is furnished mostly by decayed vegetable matter, either directly by rotted roots and sod, or indirectly by stable manure.

Where land is kept constantly under cultivation, as in the market gardens near large cities, stable manure is an absolute necessity, not only for the plant-food it furnishes, but for additional humus to the over-worked soil. In farm work, and in the home

garden that can occasionally be shifted from one place to another, fertilizers may be substituted for manures, at least to a large extent. Another source of humus, too infrequently used in the small garden, is "green manuring" or the turning under of some green crop such as rye, buckwheat, or fodder corn. Very often a strip of the garden is left to barrenness or weeds, harmful and unsightly, where a half-hour's work and practically no expense would have made an even, pretty patch of green, to be turned under after a few weeks' growth.

With soil in the proper condition, deeply plowed and carefully harrowed, we have made every provision for storing all the water we can. The second equation in the problem is to save it.

In the first part of this article I spoke of three ways in which the rainfall was lost,—by running off either on the subsoil or the surface, and by being drawn to the surface and there evaporated. It is the third of these that does the damage, for most of the water lost in the first two ways is merely a surplus that we cannot use. The evaporation, however, continues day after day, week after week, wasting the reserve supply that is so vitally necessary to plant growth. Spill a dipper of water on the surface of your garden some hot or windy day, and note how soon it vanishes—all into the air, for examination will show that it did not soak down. Now if that quantity of water

(Continued on page 122)



It is not an expensive matter to run a line of second-hand pipe from the house to several points in the garden; from these a hose connection is made

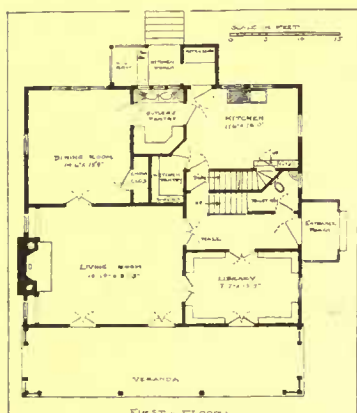
Utilizing the Waste Spaces of a House

AN EXAMPLE OF ECONOMICAL PLANNING AND THE EMPLOYMENT OF SPACE FOR CLOSETS BUILT IN DRAWERS AND SUCH CONVENIENCES—AN INSTRUCTIVE OBJECT LESSON IN CLOSET BUILDING

BY LOUISE SHRIMPTON

Photographs by George E. Doust

A SMALL house at Syracuse, N. Y., recently designed by Alfred T. Taylor, architect, might be regarded as a practical treatise on the art of closet building. Every inch of what is usually waste space in a house is utilized for ingenious cupboards or for built-in furniture.



In plan the house is nearly square, with an entrance porch separate from the long veranda

Dressers, seats and bookcases are fitted into the walls or attached to them, and the architect has seized the opportunity to carry his scheme to completion, building furniture reduced to the simplest terms of good proportion and efficiency, but made to harmonize with other architectural detail.

The Colonial character of the living-room, with its fireplace flanked by pillared recesses, is accented by a small cupboard of quaint design, one of those convenient cupboards that promote order in a room by holding magazines and music. In the bookroom the walls are lined by shelves put up by the house carpenter, made of whitewood stained a soft brown. A desk breaks the bookcase line, fitting into its place more perfectly than would the most expensive factory product.

A problem confronting every housewife is the proper disposal of her ta-

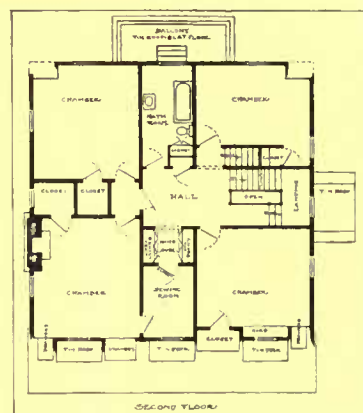


A corner of the library. A desk has been built into the line of bookcases that encircles the four walls of the room, fitting in more perfectly than the most expensive factory product



Between the dormer windows, as indicated in the second floor plan, the space has been utilized as shown at the top of the next page

ble linen, a problem usually treated in inadequate fashion, since ordinary shelves or drawers are unsatisfactory, especially for small pieces. The rack for doilies shown in our illustration is a new and feasible invention that proves extremely practical. Movable trays with thumb holes rest on



Closets and sets of drawers have been built into the slope of the roof, ordinarily waste space

grooved cleats. Each tray holds a set of doilies or napkins, and is easily carried with its contents to the serving-table. Other space in this carefully planned linen closet is filled with shelves for table cloths, etc., and a rack for table leaves.

In the culinary department, cupboards are designed with due regard to the revolution that has come about of late years in house-keeping quarters, now so much more compact and sanitary than they used to be. The butler's pantry is a model of hygiene and convenience. High casement windows flood it with light. In the ledge beneath are two sinks with reversible faucets. Space for glass and china in the opposite wall is divided into low, high and medium-high compartments, so that dishes in everyday use are easily handled without exposing others to dust. Narrow cup shelves placed mid-way between ordinary

ones are among the features utilizing space to the utmost. The kettle cupboard, opening from the kitchen, is furnished with hooks for saucepans and racks for their covers, as well as with shelves housing the shining aluminum and enamel ware that takes the place of our mothers' iron and tin utensils. A kitchen wall cabinet is another item in the architect's scheme, and has miniature flour bins and cunningly devised compartments for spices. Altogether the kitchen is calculated, through its cupboards alone, to cause a house mistress to long for the usually dreaded hiatus between cooks.

On the kitchen porch is a ledge containing trap doors lifted by sunken rings. Beneath is a shelf holding garbage and paper cans, often in unsightly nearness to a kitchen doorway. Access is had to the cans by service men through a latticed cellar entrance at one side.

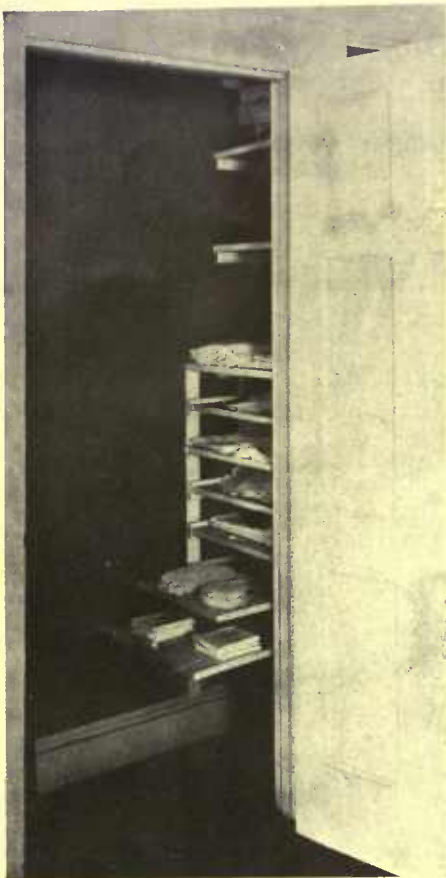
The saving of floor space, more precious in a small house than in a large one, is carried to a fine point in the sleeping-rooms. Roof spaces around dormer windows, neglected ordinarily or furnished with low cupboards into which the owner must dive head-first to find anything, are in this case filled with chests of drawers varying in depth according to the pitch of the roof. Here the clothing of the family is stored, and since there is ample room for both summer and winter wear a seasonal overhauling of wardrobe space is avoided. In the children's rooms these built-in cabinets that make chiffoniers or dressers an unknown quantity are especially useful, since they hold



One of the great objections to the gambrel-roof house is the necessity for sloping ceilings in the bedrooms, but these may be turned to an advantage as has been done here



The treatment of the living-room across the fireplace end is rather interesting, leaving the flanking windows in small bays



In the linen closet sliding shelves have been built rather close together to hold napkins and doilies

small frocks and suits full length without folding. The charming effect of white paneled spaces given by this wall treatment is shown in our illustration of the owner's room. Wide window-seats with box space beneath are also built in some of the sleeping-rooms.

The linen closet on the second floor is a roomy one with a wide ledge, drawers below it, and above shelves and cubby holes for quilts and bed-linen. A trap door in the ceiling and a pulley and tackle provide for the hoisting of trunks to the store room above, without injury to stairs or tempers.

From the cellar with its preserve cupboards to the attic with its fur-closet lined with tar paper, the catalogue of closets is a complete one. Each has its distinctive use and is skilfully adapted to it. The size of rooms is increased by the utilization of waste space, and a comparatively small house, costing \$8,500, has the value and efficiency of a much larger place, as well as a decidedly individual quality.

Besides this, the furniture is of the greatest utility, combining all the special requirements of the owner's taste and particular fancy.



A very small portion of the dining-room china closet was taken to form a music closet and architectural feature in the living-room

The Arrangement of Cut Flowers

THE PART PLAYED IN THE DECORATIVE SCHEME BY COMBINATIONS OF CUT FLOWERS—THE ELEMENTS WHICH GO TOWARD PRODUCING THE BEST EFFECTS

BY LAURA BALCH CARPENTER

Photographs by the Author



Poppies and candytuft in good arrangement

SOME time ago, a beautiful flower arrangement of hardy hydrangea and clematis, *paniculata*, remarkably well placed, excited my admiration. It set me thinking how seldom we see different flowers put together, and what chance there is to enlarge on the roses and heliotrope, and daisies and buttercups of our dear grandmothers.

The governing factor in selecting one flower to be shown with another, is contrast of growth. Contrast of color often plays a part, but not an essential part. For example, in the hydrangea and clematis arrangement before mentioned, the prettiness of the combination consisted in the contrast between the large close packed racemes of the hydrangea,

and the loose, airily constructed, finer clematis. Difference of color had nothing to do with it for both were white—the hydrangea was picked before any pink tint showed.

The photograph of white petunia and achillea affords another illustration of two plants of different growth and the same color placed together. It is necessary that one flower be more massive than the other so that the secondary flower is a kind of foil for the heavier one. There is more latitude when just foliage is chosen to put with a flower, but even then we instinctively choose a growth which contrasts pleasantly with the blossom's own leaves.

Poppies and candytuft, salvia and wild carrot, honeysuckle and white phlox, roses and pansies, are merely a few of the successful combinations that can be made. Wild carrot is charming with many garden plants that bloom at the same time. It is also usually easily obtained and can be made a garden feature. In a very large garden last summer at Lake George I saw a strip of it being cultivated for its own lacelike beauty.

In an arrangement of two or three different varieties of flowers, after a decision has been reached as to what subordinate will best show off the primary, there is a question of the disposal in the vase. Study the growth of the plants for your directions. A flower chosen for the secondary one, that is of low growth,

should maintain the same relation to the primary in the flower arrangement as it does naturally. The same is true of combinations of leaves from varieties of trees. In the photograph of autumn leaves and cedar, the maple which grows to greater height than the cedar is so placed in the vase.

Flowers which seem attractive together are best arranged with an eye for combinations of those of the same height, as in the picture of salvia and wild carrot. Here there is a contrast of color as well as the contrast of growth. When a vine forms one member of an arrangement the effect is prettiest if the extra length is allowed below, rather than above the other flower. This was accomplished in the arrangement of the morning glory and mignonette.

In all combinations consider the most massive and boldest flower the primary, arranging secondaries above and below as their growth suggests.

After primary and secondaries are assigned to their respective positions, it seems to me there are two distinct ways of placing flowers in receptacles, either by massing many of the same kind together, depending for effect on color only, or so disposing a few flowers that flower, leaf and stem each plays a part in the design. By the former method all individuality of growth is lost, but for a large decoration to be seen at a distance, it often seems the only practicable way. Imperfect flowers also can be used in this manner with good effect. Although some combinations of flowers may mass successfully, they are apt to be spotty or so blended that the original color weakens too much. As a rule more artistic results are obtained by sticking to one kind only when there is enough of it.

The second method requires few but perfect flowers, and the larger the space to be decorated, the bolder the



A pretty combination of vine and flower, hydrangeas and clematis. Be careful to balance masses with masses, and not to leave too great a space between flowers



The lacy blossoms of the wild carrot make a fine contrast with the stiffer and differently formed salvia



Morning-glories and mignonette look well on the breakfast table. The vine lasts several days if picked with buds on

flower must be. There is more room here for the originality and personality of the arranger to expand. Again study the growth of your plants for suggestions. Present their most graceful sides to view, show a beautiful curve of stem when there is one, and so place the sprays in the vases as to preserve a look of vitality at the base from which they spring, assuming that the surface of the water is this base. Prevent having too much crossing of the stems at this point as it tends to destroy the look of life, which is so desirable. Then balance the masses of blossoms and foliage against the spaces between them; for there must be spaces to show off the flowers and leaves properly. Confusion and overcrowding is best overcome sometimes by discreet clipping here and there.

One of the great principals of the art of design is to make masses and spaces balance each other properly. Why not consider your arrangement a kind of irregular design, as it were, and see that your masses of color and green, and spaces, balance each other, so there are no unpleasant holes anywhere and one part of your arrangement is not too heavy for the other part. "Balance and harmony without repetition, is the governing principle in flower arrangements as well as other Japanese Arts" says Josiah Condor and it is very helpful to keep this phrase in mind.

If we wish we may let our fancy play, and express considerable sentiment when planning combinations of flowers. "There is rosemary, that's for remembrance, and pansies, that's for thoughts," says Shakespeare. Lilies stand for purity, ivy for friendship. Grasses and wild flowers suggest the country, seaweed the sea and so on. Many pleasant times spent together and feelings of



The governing factor in selecting flowers is contrast in growth. Marigolds and snow-on-the-mount

to the recipient the lovely country home to which she had been asked as a guest.

Many contrivances are on the market for holding flowers in the positions desired. Japan furnishes turtles with cellular backs, crabs, and other devices. There are glass shapes with holes in them, to hold stems, and heavy enough to stay in place in the bottom of a vase. Wire gauze covers for vases, with different sized interstices are liked by some people. A German idea has been improved upon by one of our own Arts and Crafts shops, and the result is a serpentine arrangement of soft metal, which may be bent at will into curves for larger or smaller stems.

Personally I have found this the most useful of any of these articles. Where opaque vessels are employed, bits of stiff envelopes stuffed in between the stems and below the top of the vase, answer admirably. In shallow china, or very heavy glass receptacles, little stones and pretty pebbles furnish a satisfactory and attractive method of holding stems in position.

The Japanese make a short slit in a bit of bamboo of a suitable length for a chosen vase, and cut a little notch in one side. Sufficient spring is thus insured for the bamboo to snap into place between the sides of the vase. Stems of the flowers slipped through the slit maintain upright positions.

Twigs cut from willow act successfully in straight sided vases.

There is also much to be gained in flower combinations by choosing proper accessories, just as much as there is when arranging plants separately. One's choice of a vase should be, both in shape and decoration, of a kind to set off the flowers, rather than to display itself too prominently. The shape may be suggested by the flower itself possibly, or the stem or leaf may assist in the choice of the receptacle. The plain cylindrical shaped vase

hospitality and friendship might be expressed by a combination of oak leaves and heliotrope.

A friend of mine was sent a beautiful arrangement of roses, pansies and grasses. The roses and pansies typified the love and thoughts of the giver, and the grasses suggested

in one of our pictures is good for general use, as it is very suggestive of the straight growth of the stems.

There are a few general directions too for keeping flowers in water which may not come amiss here. Change the water every day, clipping off a tiny bit of stem. Several competent authorities suggest plunging wooded stems, and stems having a sticky, milky juice into boiling water after clipping. This method opens up the cells and induces a better circulation of sap. Poinsettia for instance responds well to this treatment. With most flowers tepid water is better than very cold. Having as few leaves as possible under water, also helps to prolong life. Indeed the Japanese consider *any* foliage under water a menace to the cut blossoms' health, and vigorously strip all stems to the height of the vase.

If opaque receptacles only are used, and so far as I know the Japanese always do use them, it is well for us to follow their lead; but transparent vases demand a different treatment of the stems inside them. We have too many kinds of beautiful glass holders, and enjoy them too much, to set them aside and confine ourselves, solely to the opaque. It is better to compromise by discreetly clipping out extra leaves, retaining a little foliage to show through the glass.

As a usual thing in this country we do not consider one flower arrangement in relation to the whole room as the Japanese do, and again as they do, make it the principle point of decoration. We select one little spot, like a table, piano, corner or window, to display our cut flowers, nor is it practicable to do otherwise as our homes are planned and furnished. But it is readily seen how close is the relation between the chosen



Phlox and honeysuckle are pleasing together. When vines and flowers are used together it is best to have the vine drop below the primary flower

spot, the vase, and plants in it, and how much thought may be put on the reciprocal relations. In short, the whole thing should be a sort of picture which its very completeness forces a little ahead of the objects around it, immediately delighting the eye and at once impressing the beholder as a part of the decorative scheme.



Maple leaves with cedar. The element of growth determines the disposal here



Our native red cedar is the hardy counterpart of the south European cypresses that have made us so envious of Italian gardens. Its variable form makes it desirable for all kinds of planting. Chas. Leavitt, landscape architect

The Four Best Evergreens

THE EVERGREENS TO CHOOSE FOR VIGOR AND PERMANENCE—
THE SUPERIORITY OF NATIVE SPECIES FOR LOCAL CONDITIONS

BY ARTHUR HERRINGTON

Photographs by Nathan R. Graves and others

THE best evergreen trees for eastern gardens are natives of the eastern states and yet it is exceptional to find them as a prominent and permanent feature in the planting scheme of the average country home. We need them and should plant them freely, not merely for the warmth and shelter they impart, but especially for their cheery effectiveness in the winter landscape.

It is strange that our native evergreen trees have been so neglected in this regard, but by sheer force of circumstances we will soon be compelled to turn to them and find in them the only solution for the difficulties of planting evergreens that endure and grow successfully.

Experience teaches, and some of us have learned a recent lesson that cannot lightly be disregarded. The death roll among evergreens in gardens and nurseries as revealed to us this spring was appalling and certainly most discouraging to many who have tried to make the home more attractive with choice plantings. The loss has not been confined to recent plantings but many specimens of large size and groups of many years' standing have suc-

cumbed to conditions, not to extreme cold; they have withstood many colder winters, but cold drying winds plus a prolonged drought proved a combination of conditions that will not have happened in vain if we heed the lesson taught. The advent of spring made this plainly apparent. Cheapness and availability must hereafter be subordinated to other important essentials that have not in the past been considered of primary importance. What has happened once can, and does, happen again, and there should in consequence thereof be a careful revision of our planting lists, if the art of good garden planning and planting is to be permanently progressive. The prevailing conditions of the fall, winter and spring of 1910-11 have unquestionably demonstrated that certain evergreens easily raised and quickly grown into adaptable stock are, in spite of their natural attractiveness, lacking one all important essential—that of permanent stability.

The losses so manifest this spring may tend to add to the dislike of, or prejudice against evergreens one sometimes encounters, unless it can be clearly shown that unsatisfactory results in



The hemlock spruce, *Tsuga Canadensis*, should be used here in place of the English yew. For grace and endurance it is unsurpassed

evergreen planting generally arise from the misuse and inappropriate planting of unsuitable types from Europe, Asia or the Pacific coast. To cite one common example that of the Norway spruce. It would have been better for American gardens had this tree never been introduced to the country, yet nurserymen continue to raise it in prodigious quantity and planters are annually found to take and plant the product.

Picea alba or *Canadensis*, our native white spruce, is an infinitely better tree. Why should it be so generally ignored except it be on account of its being indigenous to our country? It is naturally distributed throughout northern territory from Labrador to Behring Straits and is especially abundant in Maine and contiguous north eastern states. It is unquestionably a good permanent tree for gardens and greatly to be preferred to its Norwegian relative. In infancy it does not grow quite as rapidly as the Norway but this is an additional recommendation to its use for gardens of limited area, as it makes a beautiful specimen individually. If planted for the purpose of a screen or shelter-belt it may be a little longer in furnishing the objective but its permanence is undoubted and its density will be retained. It is especially bright and cheerful in its leaf coloring and shows marked variation in this respect from deep green to a decided silvery hue holding its color good throughout the entire winter. It can stand exposure in any situation without loss of verdure or virility, except that hot summers in New York and southwards, sometimes bring attacks of red spider which discolors the foliage, but this is only an occasional and temporary drawback. Another strong point in its favor is that it is a good evergreen for gardens on the seacoast. Sea air and saline winds it has long been accustomed to along the rocky shores of Maine.

In spite of all this merited praise of the white spruce those who would purchase it for planting in quantity will find the available supply exceedingly small, but only because the public has become used to buying Norway spruce and the nurseryman is not to be blamed for growing most of what is in largest demand. Let the

facts regarding the white spruce be known and an insistent demand arise, someone will meet it, for seed in abundance can be collected in the national northern forest home of this tree.

Tsuaga Canadensis, the hemlock spruce, should be with us a full equivalent for the yew tree of European gardens, yet, what scant attention it receives from garden planters? It is easily our most graceful evergreen tree, yields nothing in this respect to the commonly planted *Retinispora* which apparently has no future with us, whereas the hemlock spruce will endure beyond our time, its beauty increasing with age and stature. When planted as an isolated or individual tree it is sometimes a little slow growing and seems to be retarded or stunted by exposure, but this can be offset or corrected by giving it extra treatment in a well prepared planting site with an abundance of good soil. An unhealthy or impoverished tree not only



The white spruce (*Picea alba*) is infinitely better than the imported Norway spruce

arouses no enthusiasm but it brings about an undeserved disrepute. Undoubtedly the hemlock spruce has failed in hundreds of gardens because it was merely stuck in the ground, not planted intelligently with due consideration for its needs. A tapering pyramid of dense, luxurious yet graceful leafage such as it displays must have the wherewithal to grow from and be sustained and this is to be found in a liberal apportionment of good moisture-holding soil. Given this, no matter what the site and exposure, the tree will not dry up and die, for in the forest and on the exposed mountain side we find noble specimens braving all vicissitudes because the fundamental root needs are right.

Great forests of hemlock spruce once covered our hills where now not a tree of the species remains. In our gardens and about our homes we should, as far as we can, endeavor to restore the lost beauty of this tree whose native primal beauty has been so sacrificed to commercial need that one has to go far from the haunts of men to see it in native surroundings. The world can offer us no better evergreen tree—no substitute; in fact none half so good for American gardens. It is worthy of our best efforts to establish it permanently as a tribute to its merit; not alone for the assured self satisfaction, but for the future permanency that those who succeed us will rightfully appreciate. It has one other good point wherein it resembles the yew of Europe and that is its

adaptability to restricted growth. Given right conditions at the root, the hemlock spruce is certainly our best evergreen hedge plant and can be grown into a dense and most effectual screen.

Juniperus Virginiana, the red cedar, is coming into its own at last, as we have come to realize its distinctiveness and adaptability for special use. In some respects it occupies a unique position among evergreens as by and with it we can reproduce effects that have made us envious of some of the gardens of Italy with their tall columnar cypresses. Our native red cedar is truly the hardy counterpart of the south European cypress and a most dependable tree if properly transplanted. This operation, how-

ever, is one not to be lightly undertaken and carelessly performed or the percentage of success will be very small. The density of our cedar, the amount of leafage and consequent transpiration seem so excessively disproportionate to its root system that transplanting this tree needs to be done with special regard to its peculiarities. It was thought to be a difficult and intractable tree because collectors dug up wild trees in a more or less haphazard manner and met with scant success. Now with proper appliances

one can go to the wild cedar groves and successfully remove trees of any age and height. It is strange that for years we seemed blind to the merit and varied uses of a tree so widely distributed unless it was contempt born of the fact of its commonness. All kinds of exotic evergreens have been tried in gardens for creating certain formal or architectural effects but the very best tree for this special work in American gardens is the red cedar. Its variable form too, gives it a wide range of usefulness. There are columnar types advisable for formal planting or to give a picturesque skyline and break up the flatness of other planting. Some types grow broad and dense and make a perfect screen planting. In every respect where it can be suitably planted the cedar is an important tree and nothing that we can import from other countries excels it in character and endurance.

Pinus Strobus, the white pine, is certainly the one best pine for gardens and grounds in the east-

ern states. It is also the largest of our evergreen trees, which should be borne in mind when planting it so that it may have room to develop and throw far and wide its spreading branches. It is a rapid grower too, but if allowed plenty of room will retain its lower branches for many years. It can if so desired be kept as a dense compact lawn specimen by taking off the tips of the young growing shoots in June, but a group or grove of white pines in free, unrestricted growth is a telling feature in all stages of its growth. Its long flexible branches and long silvery leaves combine to make it exceedingly graceful; a feature the more ap-

(Continued on page 127)



The white pine, the largest of our native evergreens, has an added attraction in that it grows well even in thin, shallow soils

Making a Garden on a Hilltop

THE RECLAMATION OF A GARDEN NEGLECTED FOR TEN YEARS—THE
FITTEST SURVIVORS—HOW OLD SPECIMENS WERE REVIVIFIED

BY FLORA LEWIS MARBLE

Photographs by the Author

WHEN a man has built a house his first duty to himself and his heirs is that he should plant trees; when the trees are planted, if he is the right sort of man, on his first holiday he will lay out a flower garden.

Rockgirt is a place built on a rocky hilltop, where what to plant and when to plant it becomes a serious study. When the property came into our keeping the trees were a magnificent monument to the builders forethought, but we had to look twice to find the garden. A few uncared-for years had brought desolation. They always do. That is the pathos that strikes deep to the heart of everyone who loves a garden. I have always had the care of a little plot of ground in a town, and in idle moments I have wondered if I should go away and let the plant-battle wage unrestricted, which plants among them all would own the garden.

Here is a garden which the maker loved and cherished. He set it snugly in a hollow of the hill, open to the south sun shining across the meadow. He hauled loads of loamy dirt to make it fertile. He sheltered it by clumps of pine trees planted to the north, northeast and west. Southwest a projecting rise in the hill ascends to the house, from which place one can look down into the garden and from no other point

is it visible. As I have come to know the garden, its placing is its chief charm. To be perfect a garden must be solitary.

The first summer that we lived at Rockgirt I left the garden alone and watched it carefully, that I might answer this question of the survival of the fittest in the war of the flowers. I knew the garden was laid out nearly twenty-five years ago. I felt sure all the good old-fashioned flowers had grown there. It had been neglected for ten years. The question of what survived was sufficiently interesting to make me delay digging until everything growing there had had a chance to bloom.

The garden is fifty-five feet square. The paths were easily traced because the beds had been raised high above them, though now a thick sod of wild grasses covered everything. There had been a round center bed some eight feet in diameter with a path circling about. Eight beds, coming from the center one in a star shape, filled the remaining space. The paths had been about three feet wide. As is the case with many old English gardens, a shrub had been planted in the center of each bed. These were all alive, though a fire which swept across the meadow burned them so badly that many of them had to be cut back to the ground. The shrubs proved to be one white



The site of the hilltop garden as it looked after ten years of neglect



These were deutzias which were coaxed into bloom the first Spring



In the places where the garden joined the wood where the hepaticas grow we planted squills



The wood was our experiment station. Here we successfully sent the crocus back to nature



Wild asters were transplanted from the roadside to the edge of the meadow

snow ball, *viburnum opulus sterilis*; three varieties of spirea-blooming in May; a pink honeysuckle, *lonicera tatarica*; a fringe tree, *chionanthus virginicus*; a double deutzia, *deutzia crenata*, and a mock orange, *Philadelphus grandiflorus* — blooming in June.

About the base of the mock orange, which stood over twelve feet high, grew a tangled mass of Sweet William of all colors. By the end of the summer I knew that the Sweet William owned the place. Self-sown all these

years, it grew in thick mats defying even the wild grass. It had spread through the meadow and was growing along the wood road. Being a hardy perennial which seeds freely it had everything in its favor. A yellow day lily had thrived as well. It was holding undisputed possession of one bed, but its habits of seldom maturing seed forbade colonization. Besides these an occasional frail petunia bloomed here and there in the grass, and that was all.

Early the next Spring the man with the hoe was set to work in the garden. With a heavy grubbing hoe he removed huge clumps of sod, shaking the dirt from the roots before he put them into his wheel-barrow. These sods were drawn into the

meadow where they were piled to rot and be used again in the garden when they become good soil. This hand labor was a slow way to get the beds into shape, but ploughing was impossible without injuring the shrubs. It took one man ten days to clear the grass out of the paths and beds, and work the soil until it was mellow. He also dug about each bush and put manure into the ground at the roots. He collected the clumps of Sweet William and planted them in one solid bed and made a border about another bed. He was paid at the rate of \$1.75 a day, making the cost of reclaiming the garden only \$17.50.

At this time I took up the garden work. The man with the hoe has been called out to clean the paths every other week, which task has taken half a day each time. The planting and care of the beds I have done alone with a wheel hoe. I anticipated that this summer would be little but a battle with weedseeds in the soil, or grass roots that seemed to appear from nowhere. With this thought in mind hardy, sturdy growing plants were sown in rows far enough apart to allow of cultivation with the wheel hoe. Poppies, zinnias, marigolds, asters, heliotrope, flowering tobacco,

(Continued on page 125)



We hoped to naturalize the white boneset in the rich leaf mold of the woods



Sweet William had survived uncared for and soon ruled the place



A garden in the hollow of a hill with woods and meadows instead of a wall



Gladioli were set in trenches and cultivated as though they were potatoes

Summer Ferns for Indoors

WHAT SPECIES AND VARIETIES BEAR TRANS-
PLANTING—THE CARE AND TREATMENT
NECESSARY FOR GROWTH INSIDE THE HOUSE

BY G. A. WOOLSON

Photos by H. H. Swift, M. D.



The most serviceable of summer ferns belong to the genus *Aspidium*. Of these, *A. spinulosum intermedium* is most satisfactory

THE fern lover who gathers a wild garden outside his door is sure to take a fraction of the woods inside his home for the summer months, that he may travel there in

spirit whenever he longs for sylvan retreats and tinkling brooks which he cannot reach. Aside from acknowledged beauty and grace, the only attributes visible to the lay mind, the restful charm of environment which ferns suggest is greater by far to the genuine nature lover. They are restful also to the eye. There is, however, a practical side to be considered regardless of the sentiment which the presence of ferns induces.

Comparatively few of our native ferns adapt themselves to indoor life, being physically unable to withstand the transition from the great out-doors to the dryer air and dewless nights inside. Therefore, intelligent selection of species is imperative for successful decorative efforts with these shy wildlings.

Among other facts demonstrated by long experience is the uselessness of potting immature specimens of the larger ferns; they are apt to become distorted in the half-light of shaded houses; therefore, it is better to wait until the fronds are strong enough to withstand the disturbance of transplanting and have assumed a normal pose. The reverse is true of certain delicate species. Longer service may be expected if fructification is not advanced.

Aside from the selection of serviceable species a knowledge of the manner of root-growth is necessary for successful transplanting either out-of-doors or in. It is worth while to sacrifice a few plants with this idea in view, that others may be taken from native haunts without retarding the growth of the entire plant or injury to the fronds already developed. Ferns from the genus *Aspidium* that grow from a central crown are often uprooted with the hand alone, others require some cutting. Ferns that spring from an underground branching rootstock that sends up but one frond in a place are likely to be disturbed unless a section of turf is carefully cut and lifted. To this class belong the *Phegopteris* and *Adiantum pedatum*.

Unsuccessful attempts to grow ferns indoors or out, after proper lifting, are often due to over-zealous efforts. The inexperienced culturist is sure to plant too deep. No arbitrary rules can be given, but nature's methods are safe to follow, and these she varies for dif-

ferent genera, so each species should be observed before planting.

The most serviceable summer ferns for indoor use belong to the genus *Aspidium*. Of these, *A. spinulosum var. intermedium* is by far the most satisfactory. It is easily uprooted, rarely wilts and thrives anywhere if fairly treated; it excels other species in its indifference to change of light. It is a lovely fern, delicately cut but of firm texture, but it is no small feat to get a large plant out of a wooded swamp unbroken. There is only one way: tuck the roots under one's arm, holding the fronds back with the elbow, and then go ahead no matter how thick the underbrush may be. Superb specimens may thus be secured in perfect condition.

The type of shield fern (*A. spinulosum*) is beautiful but requires stronger light, as it grows more in the open than the variety described. This is equally true of its more imposing var. *dilatatum*, which is big and plummy, very effective in the right place.

For second choice we have the maidenhair (*Adiantum pedatum*). Many people consider this the most beautiful of all known ferns, far exceeding that of *A. spinulosum var. intermedium*, but as they are of distinct types, comparisons should not be made. The beauty of the maidenhair is architectural, the most graceful thing in fern creation. The texture, although delicately membranous, is very elastic and therefore holds its freshness for a longer time than most ferns out of doors or in. If taken up properly it grows on with little interruption.

As an excellent foil for other ferns the Christmas fern (*Polystichum acrostichoides*) has no rival, deep green and glossy, too well known to need much comment. The endurance of this species depends largely upon whether the roots were disturbed in



The maidenhair, by many considered the most beautiful of ferns, grows steadily and holds its freshness for a long time

transplanting or in the advance of fructification. I never yet knew a matured specimen with heavily fruited tips to be of much service indoors, but young, sterile plants often remain in presentable condition for six or even eight months.

The narrow-leaved spleenwort (*Asplenium angustifolium*), a clear-cut, delicately made-up fern, combines well with the maiden-hair; there is nothing in the fern kingdom that looks so cool and

refreshing on a hot day as a mass of this choice species which we sometimes find growing at the base of a lofty cliff. It is worth while to try it without the cliff and it is warranted to reduce the mental temperature of over-heated callers who are responsive to nature's lightest touch.

Although the regal ostrich fern (*Onoclea Struthiopteris*) cannot be recommended for general house culture it is, under right conditions, a great success. Isolated specimens subjected to high winds outside or strong draughts indoors quickly present an untidy study in ferns.

If we wish to drape our walls *Cystopteris bulbifera*, the most filmy and graceful of native ferns, adapts itself to our purpose. It is equally beautiful in shaded ravines, in the wild garden, or spreading its long, lacy fronds against delicately tinted walls. This species, if taken up early in the season—May or June—will last the entire summer. The root growth is singularly light and requires but a little soil to sustain life. Fronds may die but others unroll to take their places.

Fern growth in the open is governed somewhat by environment, therefore it is comparatively an easy matter to select plants to fit the place assigned. Ferns hanging over a bank or growing over a log or other obstruction are often the right shape for bracket or mantel decoration. One-sided development is preferable always for a corner situation, while an upright symmetrical growth should be used only for a centerpiece of some kind.

Ferns which naturally grow in swampy lowlands resent stagnant water and sour soil, therefore good drainage is an important factor in summer fern culture. Broken crocks or other porous matter will answer in punctured flower-pots, but sphagnum or other waste moss should be used above this matter in all other receptacles, to take up the moisture that cannot be drained out without breaking the fern itself. Light porous soil only should be used; oftentimes enough is taken up with the ferns to sustain life itself for many months. To prevent too rapid evaporation and to give a neat finish mosses of various kinds may be pinned down over the soil. Over-watering is to be avoided. On still nights, where it is possible, potted ferns may be put out to freshen

(Continued on page 130)



The decorative possibilities of ferns are best seen when they are displayed in a glass dish lined with a sheet of moss



The Christmas fern, with its dark green and glossy fronds, makes an excellent foil for other ferns



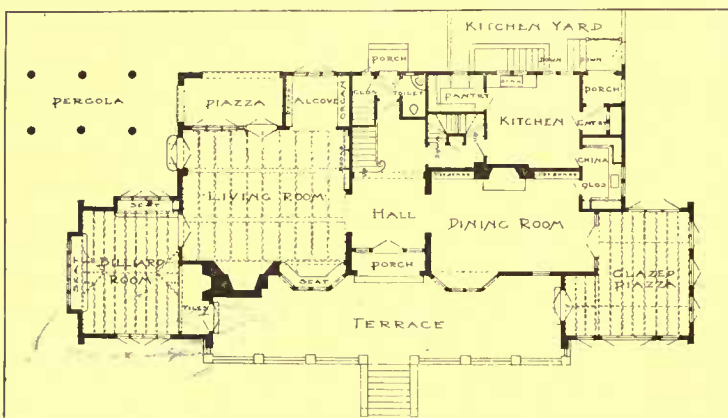
The narrow-leaved spleenwort, a clear-cut delicately formed fern, brings the freshness of the woods with it



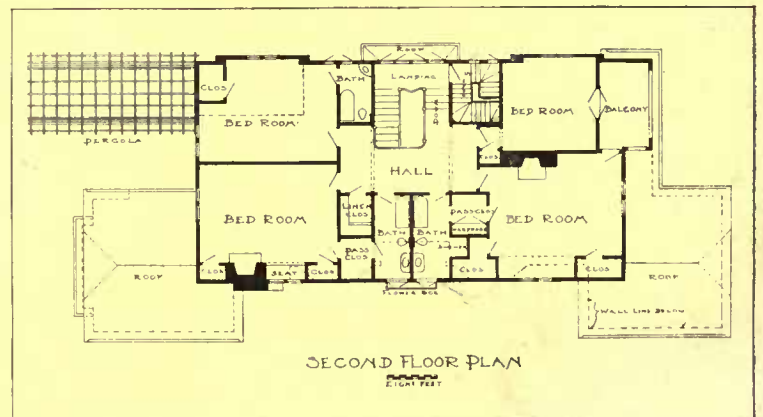
Cystopteris bulbifera is of excellent service in draping walls or in the shaded portions of the wild garden



The main entrance and service entrance are at the rear, giving to the southern exposure a long terrace commanding the view. All the main rooms of the first story are upon this side



The introduction of the front corner wings not only gives two important rooms where needed, but permits a particularly harmonious roofing scheme



Three of the four large bedrooms have adjoining baths, and the fourth has a sleeping-porch. Only the service stairway extends to the third floor rooms



Looking across the south front from the billiard-room corner. The wide brick-paved path is equivalent to a second terrace



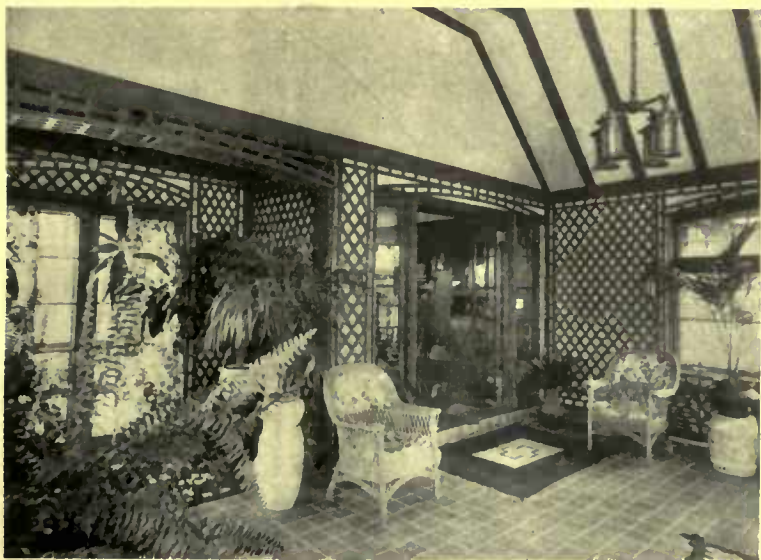
On the north side at the rear corner is a small covered piazza with a pergola adjoining. A plastered wall encloses the kitchen yard



The central hall is of generous width and at the far end contains a coat closet on one side and wash-room on the other



Looking across the living-room. At the far corner of the room, on the right, are the glazed doors to the billiard-room



The glazed porch opening from the dining-room is symmetrical with the billiard-room opposite. Dark-stained lattice work covers the side walls



One whole side of the dining-room has been treated in an interesting way by building in two sideboards flanking the central fire-place



The bedrooms are particularly large, and two of them have fire-places. The closet doors have the full-length mirror panels



A corner of the northwest bedroom, which, like the others, has been decorated and furnished in accordance with Colonial ideas



Inside the House

Timely Suggestions and
Answers to Correspondents



The Editor will gladly answer queries pertaining to individual problems of interior decoration and furnishing. When an immediate reply is desired, please enclose a self-addressed stamped envelope.

Electric Helps

PROTECTION from fire may be secured by purchasing one or more (according to the size of your house) of the electric thermostats, which cost fifty cents apiece. It is not difficult to connect them with an electric bell, and most householders can do so in a very short time. A number may be connected in such a manner that only one bell and battery will be needed. There are also adjustable ones, which may be set to operate at varying degrees of temperature, and which are very essential for anyone who has an incubator or greenhouse, as they will sound an alarm in case the temperature changes to a dangerous degree. They cost somewhat more than the fire alarm kind, because of this adjustable feature, but they often save the wages of the man who would be necessary merely for the warning which this apparatus gives.

It has been found best by the writer to specify a floor push button for the dining-room electric bell system instead of the "pear" push which is connected with flexible wires from the leg of the table to a socket in the floor, because with the flexible wire arrangement it is necessary to cut a hole in the rug or carpet with which the floor of the dining-room is covered. Do not allow such a style to be used. It is more expensive to start with, and there is no difficulty in using the other kind, which readily operates from a gentle foot pressure through the carpet or rug which covers it.

Another attachment can now be procured at a small cost which allows the street electricity to be used to ring all the electric bells in the house, thus dispensing with batteries which are so expensive and troublesome to maintain. These devices will soon pay for themselves.

A Ten Cent Jardinière

THOSE who must needs furnish on a small sum will do well to make pilgrimages to the five-and-ten-cent stores, for there treasures in the way of accessories for the home often may be found.

The jardinière shown in the illustration

was bought for ten cents. It is pleasing in appearance and practical in its usefulness. The color of the jardinière is not the terracotta of the ordinary flower pot, but a light pinkish buff that harmonizes effectively with the green of the trailing asparagus that fills it. The bowl is drained, by three little holes, into the saucer, so that any excess of water soon evaporates. When the jardinière was purchased there were no wires or chains by which to hang it, but



It is not always the most expensive that is the most serviceable. A jardinière which may be bought for ten cents

three holes had been bored in the earthenware for this purpose. A five-cent package of gold picture wire was used to suspend it. Had brass chains been used the effect might have been even more imposing.

Simple little dull green jardinières can also be bought for ten cents. These are not of the hanging variety, but are charming for use on a dining-room table when fern-filled.

Prospective purchasers at the five-and-ten-cent stores must bear in mind that the

greatest bargains are not kept regularly. However, those who will keep in close touch with the changing stock should be amply repaid for frequent visits by the treasures so often to be found.

Some Suggestions for Old Jars

A RAID of tidiness amongst odd cupboards and top shelves is almost sure to result in a great collection of old bottles and jars. Of course a certain number of these will be wanted, and can be put aside for holding home-made preserves and wines. It is not unlikely, however, that there will still remain a surplus stock which requires to be disposed of in one way or another. Instead of consigning these at once to the dust bin, it is worth while to turn some of them at least to good account after the manner here described.

One does not readily become overstocked with flower holders, and though it may seem rather a far cry from a homely jam-pot to a vase, yet by the use of a simple process or two it is surprising what effective results can be evolved.

Of course it is not possible entirely to reconstruct the character of a jar or bottle or indeed to vary it to any great extent. For this reason the vessels chosen for treatment should be principally selected from those which have the best outlines. The articles being only roughly moulded, it will also be needful to see that they are free from flaws, either on the surface or in regularity of shape.

Stone jars may be colored or decorated in any style which pleases the taste of the individual who handles them. Brush work seems to be specially well adapted for carrying out simple designs and patterns. It may be quickly done and will give a good and clear impression, which will accord rather well with the severe lines of the article in question. It is necessary to remember that anything involved or elaborate would be quite out of place in this connection, and the patterns selected, whether floral or conventional, should be those which are plain and direct in appearance.

A good enamel, suitable to stand water, may be used for the purpose, and the soft, clear shades, such as are generally used for china decoration, can be readily secured.

Of course the flower holders will not require to be washed as frequently as cups and saucers, for instance, or the enamel might be covered with a coat of clear varnish. The brushes chosen should be good ones and well pointed. The enamel must not be used too thickly and should be very evenly mixed. A medium brush will be the most useful for general work, as it is not probable that the patterns will be of any great size. A small brush or two may be kept at hand for the finer details. Each stroke of the pattern must of course be done in one piece without lifting the brush. Some skill and a great amount of care will be required to successfully place the sections on the rounded and perhaps polished surface of the jar. The strokes need to be very cleanly made with a steady hand. In order to make quite certain of the twists and curves that will best show the outline of the pattern, it may first be tried over on a sheet of paper. If preferred, the principle points can be touched in with a pencil, though as a rule the work is done directly by eye with the brush only. Of course it is necessary before carrying out the pattern to ascertain exactly its best position on the jar, so that it may show to a good advantage. Some designs look well arranged round the base of the jar, thus leaving the remaining surface plain. Others may be effectively placed just below the curve of the neck. Sometimes a small all-over floral pattern will seem the most suitable, but much will depend on the shape of the jar. Possibly it may be thought worth while to paint the glazed background of the pot entirely in one shade. Then when the coat is dry, the pattern can be worked out in another or a lighter color. As a rule, however, the original cream or white looks very well as it is, especially if the color used for decoration is a soft china blue. On a rough, unpolished earthenware, blue gray or buff gives a nice contrast.

Small pots may be decorated for bedroom pin-holders, or made into dainty little corner vases for the table-centre. Any odd china lids may also be painted with a very dainty effect in shades of blue. The idea of these may be taken from old Dutch

tiles. Ginger or honey jars make pretty preserve pots for the breakfast table, and they may be painted in colors which harmonize with the flower vases or with the coffee service.

Glass bottles and jam pots may sometimes be varied in shape by the following method of treatment. For the purpose will be required some olive oil—the commonest kind will answer very well—and a slender iron bar which will yet be substantial enough to bear heating to a great degree. The bottles selected should be of thinnish glass, those with sloping shoulders being the easiest for manipulation. The one under consideration should be placed on a perfectly level surface, and filled to a height which must be judged by individual discretion. The iron bar should be placed in a hot fire. The result of the experiment will be that the glass will break away at exactly the highest point



A jam jar simply decorated with a conventionalized design that is suggestive of its contents



A bottle vase made by filling a bottle with oil and thrusting a hot iron into it

that is touched by the oil. Thus the finished shape of the vase will depend entirely on the filling. As soon as the iron has been brought to a red heat, it should be removed from the fire and at once gently lowered into the oil until the bottle cracks in the required place. If the rod is rather a short one it is a good plan to grasp it securely with a pair of pincers to avoid any possibility of burnt fingers. The reason for the breaking of the glass is that the heat brings the oil on the surface very quietly to the boil and the bottle, being unable to expand quickly enough, breaks all round at the point where the pressure is greatest. The edges will probably be rather sharp. To remedy this, stretch a piece of glass paper firmly over a block of wood, of a size that can be easily held in the hand, and rub the border of the glass till it is smooth and regular. If desired, the vase may be decorated with metallic sealing-wax, either gold, bronze or silver, carefully banded round the top. This in itself would of course dispense with the roughness of the edge, and it would give the vase an effective finish.

It may be mentioned that the hot oil makes a very unpleasant smell, and it is better to carry on the operation out-of-doors or in a room which can be shut off from the remainder of the house. In every other respect the process is an extremely simple one and can be easily carried out by anybody. The oil does not act very well after it has become all heated by several times of using, but it can soon be cooled down again by placing it, in the flask, in a pail of ice-water. If there are a number of bottles which it is required to shape, it is a good plan to use two flasks.

Useful picnic tumblers can be made from ordinary glass jam pots, only of course it is necessary to get the edges very smooth and rounded so that they may not be unpleasant to the lips. Certainly the glasses are inexpensive and breaking will not matter, which is always an advantage for the rough and tumble meals, when one is out camping.



Delftware or Dutch tile patterns are attractive when painted on small earthenware pots



Garden Suggestions and Queries



Conducted by
F. F. ROCKWELL

The Editor will be glad to answer subscriber's queries pertaining to individual problems connected with the garden and grounds. When a direct personal reply is desired please enclose a self-addressed stamped envelope

August

AUGUST, with its heat and dust and lazy days, invariably brings us to the annual temptation to let things slide. The first and most appreciated of the flowers have all gone by; fresh garden vegetables have become an old, old story; here and there weeds are getting the upper hand in the fight, but then the crops are about all grown; so "what's the use?"

Well, there's quite a lot of use. In the first place, fully half of the garden's good things, and more than half of the flower garden's beauty, for this year are still ahead of us. In the second place, it's time for us to be planning carefully our campaign for winter and for next spring.

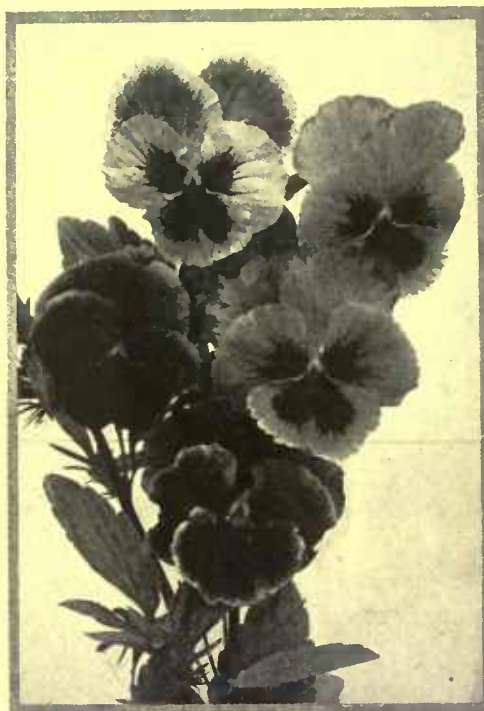
About the Grounds

TO begin with, then, there were one or two places we chanced to visit this summer that taught us some valuable lessons as to the use of trees and shrubbery. These were two or three comfortable little homes where the owners had neither greater natural advantages nor longer bank accounts than ours, but where the judicious use of a few evergreens and a clump or two of shrubbery had us outclassed as far as the general appearance of garden things went.

Plant evergreens now. Especially if the ground is fairly moist, plant them now. If it is very dry it may, of course, be advisable to wait until next spring; but in nine cases out of ten, this means that they will not be set out until next fall, if ever. There is not space here to describe the various spruces, hemlocks, pines, etc., available, at a price within reach of anyone, for beautifying the home grounds, but further information can be had on page 105 of this issue. I do wish to call attention to the fact that there are hundreds of small places upon which not a tree of these kinds is to be found, and where the expenditure of a few dollars would in the course of a few years, not only transform the appearance of the home, but add much to its market value. In planting such trees it is all important to give them a good start, and any extra care taken to make the ground fine and rich for two or three feet wide and deep where they are set, will be repaid

richly. If very dry, let several pails of water soak into the soil in the hole the day before planting. In any case, be sure to pack the earth in firmly about the roots, using a wooden rammer and the feet to do a thorough job.

Get a few catalogues—they are full of illustrations and good suggestions—and look into the tree business. You will never regret the time and money spent, for noth-



Pansies started in a coldframe will produce blossoms early in the spring that far surpass those grown later

ing else will give your property as permanent or as cumulative an improvement.

Then too, there is the matter of bulbs for next spring's blooming—it's time to be thinking of them. Isn't there a space in front of the veranda, or along the front walk, where you could use a few dozen to good effect? Twenty-five of a sort can usually be bought at the 100 rate, and the prices are very low.

There are two other beautiful and easily grown flowers which should be better

known—the Madonna lily and the Spanish iris—which should not be confused with either the popular German and Japanese iris, as it is very distinct. Both of these should be planted just as soon as you can get the bulbs, for it is important that they start growth this fall, in which they differ from most fall planted bulbs.

In the Flower Garden

NOW is the time to plan next year's flower gardens. Do it while this year's objectionable features are still fresh in mind, and while new suggestions which you may have picked up here and there are still to be remembered. Get them down on paper. Make a complete and harmonious plan, instead of just sticking things in where there seems to be most room. Probably, to do this, you will have to move around some of the hardy things. Well, the shift will do them good, and incidentally a good many clumps can be separated into three or four, giving you next spring not only more flowers but better, for overcrowding always results in poor bloom. And then there are next year's perennials to be thought of; you can easily grow your own—and the advantage of doing this is that you can have several hundred just as well as a few dozen, which isn't the case when you buy them of a florist in the spring. Under "Coldframes" you will find a word more about this.

Fruit

IT's time to get the new strawberry bed made. And while doing it, why not get a few dozen potted plants and try growing a few by the method described in *HOUSE & GARDEN* in "Grow Your Own Fruit." Set them in good rich soil, plant firmly so they will start at once, and *keep all runners pinched off*. Then with proper mulching and care, next spring you will have some of the finest berries you ever tasted. Grapes, too, should be looked after at this time. If they are not developing evenly it is probably because too many bunches have been left on the vines, and they should be thinned out. If only a few are grown, and if proper spraying has been neglected, results may be made certain by "bagging" the bunches with manila bags.

In the Vegetable Garden

IN the vegetable garden, too, even in this hot, dull month, there are several things that should be attended to. First of all, care should be taken not to let those few weeds which have escaped the numerous hoeings and weedings remain unpulled. It's a big mistake to leave them a minute. They are not only maturing thousands of weed seeds for the succeeding season, but robbing the vegetables of needed moisture and food. Keep them cleared out, and if they have become so big that they cannot be pulled without doing damage, cut them off close to the ground. Purslane—that thick-leaved, watery-stemmed pest of midsummer—must be cleaned out as soon as it appears because it will mature seeds long before you suspect it of being ready to bloom. One plant, in rich soil, will grow as big as a bushel basket, but it ripens seeds when only a few inches long. It won't die: you must not only pull it but take it out of the garden.

Wherever there is room, late crops of spinach, rutabaga turnip, bush beans, early peas, radish or lettuce may still be sown. If your garden was carefully planned you will know ahead of time where all these are to go, and be prepared with seed of the proper varieties on hand. If not, be sure to make notes for next year's garden. It is time to tie up the first plants of endive for bleaching, and to begin to blanch or earth up the early celery.

Two Specially Important Things

THERE are two specially important things that must be done now. The first is to sow pansies for next spring's blooming. They can easily be wintered with very slight protection—some strains with none at all. The best way is to start them in a coldframe. They should be sown between July 10th and August 15th—before August being better. Make the soil as fine and mellow as you can: if dry, give it a good soaking the day before planting. Sow the seed thinly, and press evenly into the fresh soil. Cover with clean sand—not more than a quarter-inch at most, one-eighth is better. Then water thoroughly, being careful not to wash out any seeds, and cover up the frame. For five or six days it may be kept dark. As a precaution against the "damping off" fungus, dust on powdered sulphur over the sand, at the rate of one ounce to a 3 x 6-foot sash. No more water will be needed until the plants are above ground; but be sure to take off the dark covering as soon as they are up. As a means of precaution against heavy rains and too hot sun, cover the frame with two thicknesses of black cloth mosquito netting. The plants can be watered through this, and in bright hot weather should be given a shower every afternoon. In about six weeks they will be ready for transplanting, which should be done as soon as two complete leaves have developed. Set in very rich, mellow soil, six or eight inches apart each way. Keep clean, and before severe freezing sets

in cover with a few leaves and pine boughs, or if kept in the frame, cotton cloth, the object being not to keep them from freezing but from frequent thawing out and re-freezing. No work you can do this fall will pay you such magnificent dividends next spring, and April, May and June will furnish you a supply of gorgeous blossoms that will surpass the ordinary pansy as the chrysanthemum does an aster.

The second thing I referred to is the sowing, about August first, of Grand Rapids lettuce for growing in the frames or under glass, if you have a place. Start the plants as in early spring, only in very hot weather keep the seed-bed slightly shaded. Next month details of transplanting and care will be given.

Coldframes

HOW about that coldframe that you neglected to build last fall, and didn't have time to put up this spring? Don't, for your own sake and pleasure, put it off longer. Do it yourself, or get it done, either way it will cost but a few dollars. Why not get it ready now, and have lettuce and radishes until Christmas, and everything ready for a hotbed for getting a six weeks' head start next month.

American Spanish Pimentos

ONE of the best of the newer vegetable evolutions is a pimento which is adapted to the United States and which is prolific and hardy enough to be of use to the northern gardener. It masquerades under the name of tomato pepper, probably because it resembles a tomato in shape and color. It is the only member of the pepper family which is always sweet, the taste of which does not occasionally remind one of a pyrotechnic display.

The fruits spring from the axil of each branch, are round in shape, scarlet in color, so mild they may be eaten out of hand like an apple, mature in succession, ripen earlier than any other variety of the family and have the true pimento flavor.



It is now time to plan for the spring blooming bulbs. They should be planted this fall to appear in season

These peppers are of extremely simple culture. The plants illustrated were transplanted to the garden about May 20th from seed sown in a hotbed about April 25th. The photograph was taken about September 24th.

The better plan, however, is to sow the seed in a greenhouse bench, hotbed or shallow pans in the house about March 1st to 15th. Transplant to thumb pots when the second pair of leaves is well matured and harden off in the cold frame, transplanting to larger pots as necessary. They may be transferred to permanent quarters about May 15th, or any time after danger from frost is past. The one great secret of success being frequent, thorough but shallow cultivation, keeping all weeds down and maintaining a dry mulch.



American pimentos hardy enough for northern gardens and with the flavor of their Spanish prototypes



EDITORIAL



WE have for some time past felt the need of a place in the magazine for a more intimate form of expression than is possible in the articles and departmental notes. In these we can but direct toward the magazine's readers the stream of information, suggestion and, perhaps, inspiration that has its source in the minds of the leaders and pioneers in home making and garden craft. In view of the fact that a man looks to *HOUSE & GARDEN* for specific instructions as to when to set out bulbs, how severely to prune raspberry bushes or what to do against the attacks of the *curculio*, the articles and notes, necessarily, have been for the most part of a decidedly practical nature. In our hunger for planting information or suggestions upon the choice of hangings we are apt to lose sight of the broader side of home making—"we cannot see the forest for the trees." With the idea that a step back for a more comprehensive view of the subject as a whole cannot fail to be productive of good, we have set aside this page. In it we shall try to find space for an intimate discussion of some of the many interesting phases of home making in America.

THE PROMISE OF AMERICAN ARCHITECTURE

NOTHING could be more suitable as an opening subject than the encouraging prospect, everywhere apparent, of American architecture and interior decoration. Look back, if you will, but ten years, and recall the almost hopeless depths into which our national taste had sunk. Picture the stuffy, uncomfortable, depressing "parlor" of that day, with its lathe-product furniture, its sprawling design of gilt encrusted wall paper, its gaudily colored carpet, its hideous array of mantel ornaments and its rococo gilt picture frames that waged incessant warfare with their blatant background. Surely the picture is not overdrawn. Compare it with the home of today in country or suburbs. Could any prospect be more encouraging than this tremendous step forward?

OUR DEBT TO ARCHITECTS

THERE have been many forces at work assisting in this renaissance—the material prosperity of the nation, the increased facility of travel abroad and the advance of our educational standards among them, but it seems to us that especial credit is due the architects of the past two generations in America. Early and late they have labored for better things in American art, usually in the face of a lamentable but nevertheless firmly established tradition, ignorance, and a national taste that was at its lowest ebb. To these men who, by reason of their education and reinvigorated taste, strove always for better things, greater credit must be given by reason of the fact that they chose not the easier path in their work. It is always easier to make a living by giving a man just what he wants in the shape of a house rather than to impress upon him the desirability of spending his money for something that as yet he is unable to appreciate. Yet, on the whole, that more difficult course is the one the architect has in recent years chosen, and is choosing today.

AN INTERESTING EVOLUTION IN FURNITURE

THE betterment along the lines of interior decoration has followed the lead of our architecture and, particularly in the last four or five years, has made rapid strides towards the high levels that have been set in certain epochs of the past, when the pendulum of artistic appreciation had swung to a high point of

the arc. It is particularly interesting, and perhaps instructive as well, to glance back over the more or less distinct stages by which we have reached the point we now hold. As might naturally have been expected, the increasing efficiency of wood-working machinery led the generation or two before us into a veritable riot of turned forms, machine-pressed "carving" and jig-saw detail that had absolutely no excuse for being, excepting that it showed how marvelously versatile our machinery had become. Satiated to the point of rebellion with this sort of thing, it was once more the perfectly natural thing for the public to face about and seek relief in the products of hand craftsmanship—the furniture that proclaimed, vociferously at times, by exposed tenon and pin, neat mortising and the absence of all curved lines, carving and other forms of ornament, its escape from the thralldom of the machine. Though better than what had gone just before, the unnecessary weight and clumsiness of this so-called Mission furniture—and with it came obtrusively coarse hand-woven hangings and ornament founded on geometrical forms rather than on plant life—soon became wearisome. A gradual process of lightening and greater refinement soon began to make itself felt, the beauty of the curved line was again recognized and finally a feeling after suitable and restrained ornament has started to develop. Of course there have been other tendencies apparent in this evolution—our recognition of the beauty of wood and line in the furniture and architectural detail of our Colonial ancestors, the influence of the *art nouveau* that stirred Germany into an artistic revolution, and our increased familiarity with the spirit and letter of historic styles that have gone through their marked cycles of revolt, refinement, decadence and revolt again in France and England. An unprejudiced survey of the road over which we have come in the past decade, however, cannot but be encouraging. We have been sifting out the chaff and, in the main, have refrained from straying into side paths that would have led only to disaster.

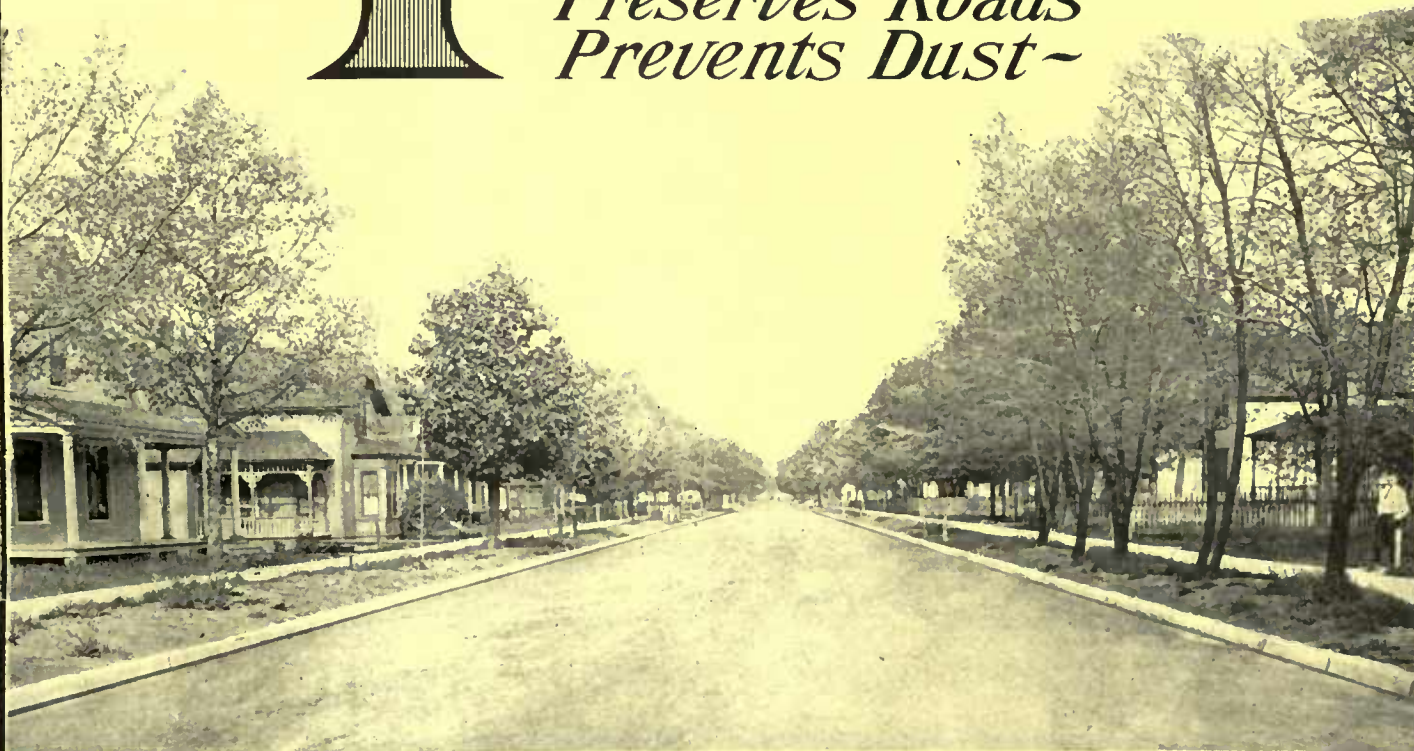
The progress in furniture is but an index of the advance made in the past decade in other branches of interior decoration. Look, for instance, at the wealth of varied design and texture in the fabrics now obtainable for hangings or for furniture coverings—and these not alone in the more costly forms. Indeed, in the case of fabrics, excellence in design seems to be found, as it should be elsewhere, nearly as frequently among the inexpensive stuffs as in those of greater cost. Look, also, at our modern American pottery, the increasing use of simple brass receptacles, the prevailing higher standards in floor coverings, the notable improvement in wall-paper design—particularly along the line of restraint and better color. Is not all this a most pleasing prospect?

AN AWAKENING TO THE JOYS OF GARDENING

OUR progress in gardening during the past decade has not been so marked as in architecture and interior decoration. Or perhaps it would be more nearly accurate to say that the advance, while as sure, has not been so apparent because of the fact that America as a nation has not yet reached a point where it is as much a national instinct to make a beautiful garden as it is to make a beautiful home. There is no need to reproach ourselves with this fact—just as there is no need to reproach a child because he can walk but cannot talk. We simply have not arrived at the gardening age, nationally. In England, as we all know, even the most humble laborer has his dooryard garden—he would as soon think of dispensing with it as with his cup of tea. The day when we, too, will have reached that stage is not yet in sight, but it is coming.

Tarvia

*Preserves Roads
Prevents Dust~*



Eighth Street, Traverse City, Mich., Constructed with Tarvia X.

Tarvia In Traverse City

THE problem of finding an inexpensive, clean, dustless paving for streets of small cities has been solved by the development of tarviated macadam. This differs from ordinary macadam in that the voids of the roadway are filled with a matrix of Tarvia, a tough waterproof coal tar product.

Tarviated macadam costs but little more than ordinary macadam, and costs no more in the end because the Tarvia treatment reduces maintenance expense. Its plasticity makes it exceedingly quiet. Automobile traffic does not damage the surface, but, in fact, makes it smoother.

Traverse City, Michigan, one of whose

streets is illustrated above, is one of the towns which has found tarviated macadam to be the best and most economical solution of the paving problem.

On Feb. 7, 1911, Mr. E. Wilhelm, The Mayor, wrote as follows:

"We have used Tarvia in paving a number of our streets with very satisfactory results. When properly laid, a smooth, elastic surface is produced, and I believe that it is equally as durable as some of the more expensive kinds."

Booklets regarding Tarvia will be sent free on request. Every property owner who suffers from the dust nuisance or from high road taxes, should know about this new type of roadway.

BARRETT MANUFACTURING COMPANY,

New York, Chicago, Philadelphia, Boston, Cleveland, Cincinnati, St. Louis,
Kansas City, Pittsburg, Minneapolis, New Orleans, Seattle, London, Eng.





Asbestos "Century" Shingle Roofs. Five Model Cottages. Esmond Co., Inc., Enfield, R. I. Architects, Hilton & Jackson, Providence, R. I. P. Oscar Nordquist, Contractor, Providence, R. I.

ASBESTOS "CENTURY" SHINGLES

"The Roof that Outlives the Building"

The average property owner gets bitten in selecting his roof.

He takes too much for granted—likes the *looks* of his architect's sketch and forgets to insist upon *durability* in the roof. It's only when bills for repairs and painting pile up that he realizes his mistake.

Asbestos "Century" Shingles are the only roofing in the market that combine architectural beauty with *absolute and permanent protection to the building*.

Asbestos "Century" Shingles are thin, tough and elastic shingles of *reinforced concrete*. They are the first and only practical light weight roofing ever made of this indestructible material.

They are proof against fire—against

weather—against time. They need no painting or repairs.

Asbestos "Century" Shingles are adapted to all architectural styles. They come in many shapes, several sizes and *three colors*—Newport Gray (silver gray), Slate (blue black) and Indian Red.

It's worth your while to talk with a responsible roofer about Asbestos "Century" Shingles—or write us. Send for Booklet C, "Points on Roofing."

The Keasbey & Mattison Company

Factors

Ambler, Pennsylvania

The Decorative Possibilities in Roofing

(Continued from page 89.)

direct mischief upon similar occasions.

Great flanking double stone chimneys at each gable-end of a Colonial house, as shown in the photograph, give an aspect of strength and solidity that is sure to please a taste for robust architecture. The whole house has an established look. The chimneys with the connecting curtain walls would prevent any suggestion of angularity even in a steeper roof and have almost the effect of battlements.

The third picture shows a felicitous arrangement of dormer windows where the lines and proportion of the roof are not disturbed by their introduction. The frames and casements are of such light construction and so unobtrusive that they do not destroy the balance, and we still have nearly the unbroken effect of an unpierced roof. Dormers unless judiciously managed can work confusion. A roof all full of dormers loses its dignity and calm and becomes restless. It is like an unduly inquisitive, pecky person whose argus-eyed curiosity is always on the watch in all directions to see what goes next. So many of the English cottage roofs owe their charm to their unbroken surface and treatment.

Attention should also be called to the placing of the chimneys which are so set as to break the sky-line agreeably. The proper placing of chimneys so as best to relieve the sky-line is a subject that cannot be too closely studied whether they be grouped or built at intervals.

The small house with the windows of the second floor bursting through the roof in a solid phalanx is a fairly successful piece of work. The effect of the one-and-a-half story house has been preserved and the windows of the second floor have been brought through the roof in such a way as to let you feel they are still a part of the roof. The gabled sky-line and irregularly placed chimneys of the English half-timbered house denote a steady normal growth, here a little and there a little, as the needs of each succeeding generation demanded. While the irregularity of the many additions breaks up the mass of the roof, it does not destroy its unity.

Who can resist the appeal of an old gambrel-roofed house? The old Dutch house in the picture with its well-proportioned gambrel, its steeper slope pierced by modest dormers and ending in a generous outcurved overhang forming a porch cover, and last but not least, its airy balustrade surmounting the ridge of the roof, offers an example worthy of sincere imitation. It is a type especially suitable for the small country or suburban house and offers itself readily to modification. The one great danger in planning a gambrel roof is the tendency to make it too small. It is perfectly true that a gambrel roof is much better suited to a small house than a large one, but for the size of the building all the roof surface possi-



"Silver Lake A"

Braided Sash-Cord
(Name stamped on every foot)

Have your architect specify it in his plan. It won't cost you any more, but will save you loads of trouble. It is solid-braided of cotton, not waste; can't stretch and is non-flammable. When the windows are being put in, or when you have to reweave the other cord, look to see that Silver Lake A Sash-Cord is used. Silver Lake has been the accepted standard in U.S. Government braided cord specifications for 40 years.

SILVER LAKE COMPANY
87 Chauncy St. Boston, Mass.

Makers of Silver Lake Solid-Braided Clothes Line



ANTIQUE FURNITURE

Rare China, Pewter,
Old Lamps, Andirons, Etc.

NO REPRODUCTIONS

HENRY V. WEIL

698 Lexington Avenue

Cor. 57th Street

New York

ble should be allowed. The balustrade does not belong particularly to this style but is found in many other instances, notably around square flat spaces on the tops of old hip-roofed houses, where it lends lightness and varies the sky-line.

The old Virginia house is an estimable member of a stately race. The hip-roof whose five narrow dormers avoid the effect of extreme width, is full of strength and virility and with the generous throated chimneys is expressive of the lavish hospitality and semi-feudal life that obtained there. Of the jerkin-head roof we need only say that it is not apt to be the source of much joy unless managed by very skillful hands. Before quitting the subject one must advert to an example of what not to emulate. The collection of houses, shown in an illustration, whose spasmodic sky-line and tortured angles present a variety of roofing materials, has no cohesion about it. The restless humpiness of the roof is simply suggestive of a conglomeration of several buildings—everywhere is absolutely meaningless diversity and breaking of lines. In this particular instance it has no further pretensions, but were unity aimed at instead of convenience, such construction would be impossible.

Ordinarily sky-line is not profoundly affected by the texture of the roof except in the case of thatch when unusual softness and flexibility are possible. Note the difference between the lines of the slate and thatch in the illustration. By an ingenious device of laying shingles with varying spaces exposed to the weather, and by furring most of the rafters and slightly dropping those at the ends of the gable, the effect of thatch can be approximated. Slates of graduated size and thickness and varying color are being extensively used with satisfactory results. Tiles of different kinds and all the old accustomed sorts of roofing materials offer almost endless possibilities of roof texture which deserve detailed consideration that must be given at some future time.



The Trend of Modern Furniture

(Continued from page 95)

assemble them with this charming style in the living-room and dining-room; and the owner of Hepplewhite or straight-legged Chippendale, perhaps very restrainedly carved, may feel safe in bringing certain of these pieces to its companionship. Their employment as a style or as a type secures oneness of effect not to be gained by a miscellaneous use of eighteenth century pieces.

And we have here, it may be asserted, the key-note of future informal furnishing—when rooms will not be furnished helter-skelter, nor pictures hung hit or miss—the assembling in phase or style by types. Conglomerate furnishing was a revolt against the equipment of the parlor.



NABISCO Sugar Wafers

The one confection that offers unalloyed sweetness without cloying the appetite—offering the fragile goodness so desirable in an after-dinner tidbit.

Nabisco Sugar Wafers

are appropriate at all times and on all occasions. They are enjoyed by the little ones as well as grown-ups.

In ten cent tins

Also in twenty-five cent tins

**NATIONAL
BISCUIT
COMPANY**

PLAN YOUR NEXT SPRING BULB DISPLAY NOW

Darwin Tulips for the Permanent Garden Our Specialty

There is no better subject for the PERMANENT GARDEN. Will last a lifetime; each year producing finer blooms.

OUR SPECIAL OFFER

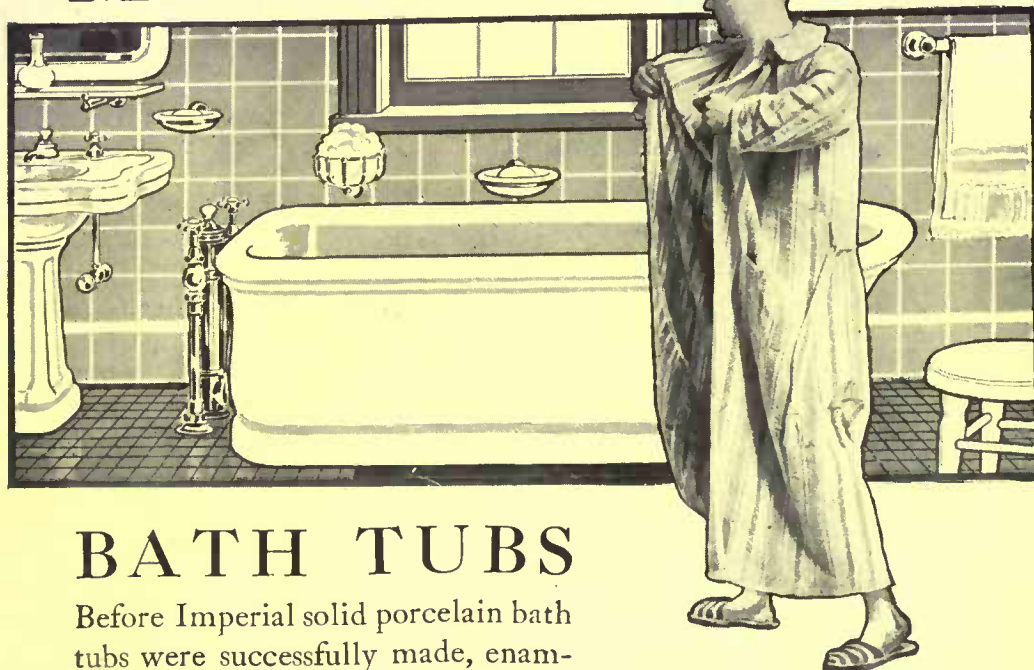
One Each 25 Varieties (25 Bulbs) \$1.00

Catalog further describing these grand Tulips on request.

STUMPP & WALTER CO.
Desk A 50 Barclay St., New York



MOTT'S PLUMBING



BATH TUBS

Before Imperial solid porcelain bath tubs were successfully made, enameled iron was the generally accepted material. We make a complete line in both Imperial solid Porcelain and enameled iron. For the better class of work, however, Imperial solid Porcelain is undeniably superior for beauty, cleanliness and durability. Its hard, snow-white surface, fired in the kiln at a heat which would fuse metal, can be kept spotless by simply wiping with a cloth or sponge.

THE J. L. MOTT IRON WORKS.

1828 EIGHTY YEARS OF SUPREMACY 1911
FIFTH AVENUE AND SEVENTEENTH STREET
NEW YORK CITY

MODERN PLUMBING

To get a more complete idea of the possibilities of bathroom equipment send for our booklet "Modern Plumbing". It gives description and prices of the latest types of fixtures in both Imperial Solid Porcelain, Vitreous Ware and Porcelain Enameled Iron. 24 illustrations show complete model bathrooms ranging in price from \$74 to \$3000. Sent on receipt of 4 cents to cover postage.

BRANCHES

Boston, Chicago, Philadelphia, Pittsburgh, Detroit, Minneapolis, Washington, St. Louis, New Orleans, San Francisco, San Antonio, Atlanta, Seattle and Indianapolis.
CANADA: 83 Bleury St., Montreal



TO MAKE SURE THAT YOU ARE GETTING GENUINE MOTT WARE, LOOK FOR THE MOTT LABEL ON EACH PIECE



Comfort is the desideratum in these types. They are like sedate but good-natured persons, never in the way; they do not offend by too vigorous characteristics, yet maintain individuality and are far removed from the commonplace. We have here grace with strength, quaintness without queerness, sentiment with dignity, the distinction of the furniture of the olden days, the luxury of color in mahogany and coverings, the restfulness of the best upholstery, and all made practical. This is not specifically men's or women's furniture. Its various designs are calculated to accommodate many human forms. It is being used in the finest houses, the most intimate homes.

To the student of furniture it is an interesting evolution. To a gilt-crazed American it may be mighty plain furniture. To the home-lover and the housekeeper it is beautiful and economical, of a style that can never be "out of style."

Since nothing is new under the sun, why is it not credit enough to the American maker and designer, that, in addition to having admirably reproduced examples of the styles historic, they now, under the demand for simplicity and utility as well as beauty, evolve from the spirit of the past not lifeless adaptations, but specimens such as these?



Fighting the Drought

(Continued from page 99)

is taken away from a square foot of surface in a few hours, try to imagine the amount lost upon even an eighth of an acre in a week of dry weather! And, unless you stop it, it will continue to rise from the depths of your garden and pass away invisibly into the air.

Fortunately, the way to stop it is simple and easy. *From the day your garden is planted until you can't get between the rows, never let a crust form on the surface.* That's the whole story. With iron rake and hoe and wheel-hoe keep the surface inch or two of soil finely pulverized. Especially just after every rain go over everything as soon as possible. Never mind if your garden is dry as ashes all the time; that is the way you want it, on the surface. And then, when your neighbor, obsessed with the foggy idea that the soil should not be stirred because it makes it dry out, is complaining about dry weather, you can scrape down with your fingers through the dust and take up a handful of good moist soil.

But times will come, in the driest seasons, when every precaution that has been taken will fail to hold the fort against the enemy. Day after day, week after week, you watch in vain for the black bank of storm clouds in the northwest, or hope for the heavy artillery of the heavens that foretells at least a temporary relief from the prolonged siege. Your water is giving out. Even if every possible drop has been

Let Me Build a Fountain

according to your own plans or design and build one to fit your place.

We also have the Rose Bush Fountains (with or without electric illumination) the latest and most attractive garden novelty on the market.

Twenty-two years of experience in beautifying the finest estates has qualified me to beautify your place. Don't decide upon any type of fountain or garden ornament of any kind until you have seen our catalogue, which will be sent upon request.

A. S. JACOBSON

American Garden Beautifying Company,

Fountain erected by me at Duke's Park, Summerville, N. J.

430 FOURTH AVE., NEW YORK



THE ROSE BUSH FOUNTAIN

300 SCHENCK AVE., BROOKLYN, N. Y.

saved in the soil, growing plants have exhausted it. You must, after all, lose the battle, or irrigate.

Now, to the average mind that word irrigate means vast reservoirs costing millions of Uncle Sam's money, and miles of pipes and sluices and ditches and flood-gates—an undertaking of the titanic West. But it need not suggest these things. It means simply applying water to your plants in such quantity that it will be of some real use—the ordinary watering is frequently worse than useless; for unless enough water is applied to soak down into the soil, the results are a crusted, packed surface, and roots tempted up to the hot top soil. With their inexplicable instinct, they will turn toward food or moisture as surely as a sunflower follows the sun.

The principle of irrigating involves only three factors, and they may be of very simple solution. First, an adequate supply of water; second, a suitable means of transporting it; and lastly, some method of applying it properly.

Probably many of the readers of this magazine have city water, with enough force from their three-quarter-inch pipes to run a good stream through an inch hose. For them the problem is a very simple one—unless some day when perhaps a few dollars' worth of extra hose is left by the department store's wagon, there comes a short notice from headquarters stating that there is enough water left to last thirteen days more, and will every one please be careful.

There are, however, many houses in which the water supply comes through a small pipe from a well or spring, and while the supply is constant, the amount of water on hand at any one time is very limited. In such instances some method of storing up the water until a suitable quantity for irrigating is on hand, becomes necessary. Either an open tank, elevated at least several feet above the spot to be irrigated, or a compressed air tank will answer the purpose. Or if the water is in a large cistern, or deep well, a good pump will save the necessity of a storage tank, the water being applied to the soil directly from the supply pipe. It may be operated either by hand, or a gasoline engine or electric motor—the system, of course, depending upon the amount of water required and other circumstances.

The cost of the various items mentioned above is, of course, of interest to the persons investigating an irrigation system. A metal or wood tank will cost from \$15 up, according to size. A cheap and practical substitute may be had by uniting several barrels or hogsheads, which can be bought, without heads, for from 35 cents to \$1.50 apiece. Short pieces of iron or lead pipe inserted a few inches from the bottom are used to connect them. The iron pipes are made tight by means of washers and lock-nuts, and the lead pipes by being driven through into the barrels half an inch or so, and then reamed out and hammered down tight. In this way a tank of considerable



Fire Fighting and Telephoning

Both Need Team Work, Modern Tools
and an Ever Ready Plant, Everywhere

Twenty men with twenty buckets can put out a small fire if each man works by himself.

If twenty men form a line and pass the buckets from hand to hand, they can put out a larger fire. But the same twenty men on the brakes of a "hand tub" can force a continuous stream of water through a pipe so fast that the bucket brigade seems futile by comparison.

The modern firefighter has gone away beyond the "hand tub." Mechanics build a steam fire engine, miners dig coal to feed it, workmen build reservoirs and lay pipes so that each nozzleman and engineer is worth a score of the old-fashioned firefighters.

The big tasks of today require not only team work but also modern tools and a vast system of supply and distribution.

The Bell telephone system is an example of co-operation between 75,000 stockholders, 120,000 employees and six million subscribers.

But to team work is added an up-to-date plant. Years of time and hundreds of millions of money have been put into the tools of the trade; into the building of a nation-wide network of lines; into the training of men and the working out of methods. The result is the Bell system of today—a union of men, money and machinery, to provide universal telephone service for ninety million people.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY AND ASSOCIATED COMPANIES

One Policy

One System

Universal Service



CHARLES H. SPERRY, Architect, New York, N. Y.

Dexter Brothers' English Shingle Stains

Bring out the grain of the wood and prolong its life. 50 per cent. cheaper and far more artistic than paint. The best possible finish for shingles, half timbering, clapboards, and all outside woodwork. Made of finest English ground colors, linseed oil and special Dexter preserving oils. Write for booklet and stained miniature shingles.

Dexter Brothers Co., 115 Broad St., Boston, Mass.

BRANCHES:
1133 Broadway, New York; 218 Race St., Philadelphia; Pa.

Also Makers of PETRIFAX CEMENT COATING
AGENTS—F. H. McDonald, Grand Rapids; H. M. Hooker Co., Chicago; E. B. Totten, St. Louis; F. T. Crowe & Co., Seattle, Spokane and Tacoma, Wash.; and Portland, Ore.; Sherman Kimball, San Francisco; Hoffschlager & Co., Honolulu; and DEALERS.



Stain Paint
Stain brings out the grain, gives a soft, velvety appearance. Paint hides the grain, spoils the natural surface of the wood.

SARGENT

Hardware

is the choice of experienced architects and builders who take into account every quality that building hardware should possess:

Artistic Harmony—Sargent Designs include distinctive styles in every school of architecture;

Beauty of Finish—obtained by most careful workmanship and use of fine metals;

Weaning Quality—insuring satisfactory wear at the vital points such as latches, hinges, window fastenings, etc., and saving repair bills.

Safety—Sargent Locks are famed for security.

Ask your architect to specify Sargent Hardware and aid you in selecting harmonious designs. The Sargent Book of Designs and Colonial Book will be sent free on request.

SARGENT & COMPANY
142 Leonard St., New York



capacity can be made for a few dollars. The barrels should, however, be kept under cover, and never allowed to remain long empty, on account of shrinking and consequent leaking. Where a considerable amount of ground is to be wet, a power pump will be required. A good pump capable of throwing 800 gallons an hour against no pressure, can be bought for \$40. Small gasoline engines, of ample power for operating such a pump, cost from \$29.50 to \$75 or \$100 according to make. An electric motor will cost about \$75, but second-hand ones may often be had at low prices at receivers' sales, if one happens to be within reach of a large city. Iron pipe, suitable for water under low pressure, can be bought at from four to fifteen cents a foot, according to size, and whether it is second-hand or new.

The water may be applied either by an automatic sprinkler, a nozzle, or by flowing from the open hose, where there is not sufficient force to wash out the soil to an injurious degree. In large market gardens, overhead piping systems, so arranged that a regular rain may be turned on or off at will, are often used, but they would hardly pay for the home garden.

The water should be applied towards evening, or in cloudy weather; never in the bright sun if it can be helped. The most important thing is to have the ground thoroughly soaked. It is, of course, possible to overdo it, but one is not at all likely to. Water sufficient to cover the soil an inch deep—that is, equal to a one-inch rainfall—will not be too much when the ground is dry. One good soaking a week, or two for such moisture-loving plants as celery, cabbage, cauliflower, etc., will be sufficient in ordinary dry weather.

Do not, if you do use irrigation, forget the importance of moisture-conserving cultivation. Irrigation will not take the place of cultivation: it should be used as a supplement to it, not as a substitute for it.

Remember that with irrigation you gain control of the most uncertain and most important factor of outdoor gardening, the moisture supply. You can plant a smaller garden, and make it produce surer and bigger results.



Getting Acquainted With the August Flowers and Shrubs

(Continued from page 92)

with flowers six inches across.

GOLD-BANDED LILY (*Lilium auratum*), the showiest and largest of the true lilies. The flower is pale yellow with a golden centre band and crimson spots. Unfortunately the bulbs die out in a few years, but they are well worth renewing even at their comparatively high price.

RED-HOT POKER PLANT (*Kniphofia aloides*), a gorgeous plant bearing long, erect cones of scarlet and orange flowers, one hundred or more to its five-foot stalk.

Plant for Immediate Effect

Not for Future Generations

Start with the largest stock that can be secured. It takes over twenty years to grow such Trees and Shrubs as we offer.

We do the long waiting---thus enabling you to secure Trees and Shrubs that give an immediate effect. Price List Now Ready.

ANDORRA NURSERIES Box CHESTNUT HILL,
H. PHILADELPHIA, PA.

WM. WARNER HARPER, Proprietor

You may meet it under the name *tritoma*.
SHRUBS

I have space for but a mere list of the shrubs you should find in bloom this month, with color of flowers:

BLADDER SENNA (*Colutea arborescens*), yellow.

BLUE SPIREA (*Caryopteris Mastacanthis*), lavender-blue.

DWARF HORSE CHESTNUT (*Æsculus macrostachya*), whitish.

NEW JERSEY TEA (*Ceanothus Americanus*), white.

STAGHORN SUMACH (*Rhus typhina*), dense panicles of flowers, followed by attractive red fruit masses.

SWEET PEPPER BUSH (*Clethra alnifolia*), white fleecy flowers, spicy fragrance.

HARDY HYDRANGEA (*H. paniculata*, var. *grandiflora*), white, turning to pink.

ROSE OF SHARON (*Hibiscus Syriacus*), pink, red and white.



Making a Garden on a Hilltop

(Continued from page 109)

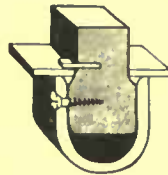
pansies, parsley and even lettuce and a few tomato plants found their way into the beds. Two beds were bordered with gladioli. These were set in trenches ten inches deep and cultivated as if they were potatoes.

The mid-summer was perfectly dry. One month passed with only a single shower. Every week I went over the garden with the wheel hoe. The dust would fly under the blade and the work took on the character of sub-soil farming. Thanks to the deep preparation of the soil that the grass roots had made necessary, and the constant working of its surface, the garden grew in spite of dry weather, and we had flowers and salads from it all summer. The gladioli were especially fine, much better than I have grown from the same stock when I have planted them less deep and watered them. They grew very tall, and stood erect without stakes. The flowers were large and perfect.

When a square garden is set down beside a meadow with pine trees on one side, a hillside jutting with rocks and covered with daisies on another, and blue mountains stretching thirty miles away on every side, the masses of flowers must be larger and the colors more pronounced than those of the garden with a wall about it, or one that breathes the air of a city or town. This garden could never have a wall: its charm is its own, that of being able to look past the gay posies to a blue mountain background, but the step between meadow and garden seemed at first difficult to make. However, this is what has been done. A path three feet wide goes all about the outside of the beds. Beyond this, on the south, berry and currant bushes have been set in rows. All the large stones have been piled by the path that skirts the rocky hillside, and clematis



Stop wishing for a Greenhouse Buy One



This is the U-Bar
The Bar that makes
U-Bar Greenhouses
The Famous Green-
houses they are.

YES, buy one—you intend having one some day, so whatever is the use of putting it off year after year and missing the hundred and one pleasures it makes possible. Why not do a little scheming and if necessary cut something else out so you can bring the greenhouse in? For nine solid months your greenhouse garden can be in bloom. Your out-doors garden will be supplied from it with good stocky ready-to-bloom plants that will mean at least a month's advance. But what is the use of dwelling on a greenhouse's advantages? Everybody knows how indispensable they are nowadays.

However, before you build make sure of the right construction. There are certain logical reasons why the U-Bar should have your most careful consideration—after that, make your decision. Send for our catalog, or send for us—or both.



One of the indispensable uses of a greenhouse is for the protection and keeping fresh and healthy of such ornamental plants as are used about the stoop and grounds in summer.

U-BAR GREENHOUSES

PIERSON U-BAR CO

ONE MADISON AVE., NEW YORK
CANADIAN OFFICE, 10 PHILLIPS PLACE, MONTREAL

"Standard"

GUARANTEED PLUMBING FIXTURES



SANITATION in the modern home should not stop at efficiency alone. Artistic appearance is an important consideration.

The pleasing designs of "Standard" lavatories aid greatly in the making of the bathroom beautiful.

The high reputation and increasing demand for "Standard" guaranteed plumbing fixtures have led to widespread substitution of inferior goods. Be sure, therefore, that you specify "Standard" fixtures, *not verbally, but in writing*, and make certain that they are installed.

Genuine "Standard" fixtures for the Home and for Schools, Office Buildings, Public Institutions, etc., are identified by the Green and Gold Label, with the exception of baths bearing the Red and Black Label which, while of the first quality of manufacture, have a slightly thinner enameling, and thus meet the requirements of those who demand "Standard" quality at less expense. All "Standard" fixtures with care will last a lifetime. And, no fixture is genuine *unless it bears the guarantee label*.

Send for a copy of our beautiful catalog "Modern Bathrooms." It will prove of invaluable assistance in the planning of your bathroom, kitchen or laundry. Many model rooms are illustrated, costing from \$78 to \$600. This valuable book is sent for 6 cents postage.

Standard Sanitary Mfg. Co.

Dept. 40

PITTSBURGH, PA.

New York.....35 W. 31st Street	Nashville.....315 Tenth Avenue, So.	London.....53 Holborn Viaduct, E. C.
Chicago.....415 Ashland Block	New Orleans, Baronne and St. Joseph Sts.	Houston, Tex., Preston and Smith Streets
Philadelphia.....1128 Walnut Street	Montreal, Can.....215 Coristine Bldg.	San Francisco, Metropolis Bank Building
Toronto, Can.....59 Richmond St., E.	Boston.....John Hancock Bldg.	Washington, D. C.....Southern Bldg.
Pittsburgh.....949 Penn Avenue	Louisville.....319-23 W. Main Street	Toledo, Ohio.....311 Erie Street
St. Louis.....100 N. Fourth Street	Cleveland.....648 Huron Road, S. E.	

(*paniculata*) planted where it can grow over them. Goldenrod, wild asters, evening primroses, wild lilies and wild flowering shrubs are being massed along the other two sides of this outer path to further restrict and frame the garden setting.

The garden is reclaimed now, and from this time on it can receive as many and choice varieties of hardy flowering plants as my pocketbook can afford.

Just here let me mention one of the chief advantages of growing flowers on a hilltop. The frost comes several weeks later than it does in the valley. Long after the fall flowers in the low gardens are dead and gone ours are blooming merrily. In the winter the hilltop is several degrees warmer than the valley. Last winter on the coldest night the Rockgirt thermometer registered only eight below zero, while in the village in the valley and even just at the foot of our hill the thermometers went down to twenty-two degrees below zero. Such a difference renders it possible to winter roses on the hill which cannot stand the damper cold of the valley, and this has been done successfully by a hilltop neighbor of ours. Of course, this works the other way in spring. The flowers in the valley are in bloom first if left to themselves, but our garden, being sheltered from wind and open to all the sunshine, is only about a week later.

A garden, to me, is a place apart, a place where I can go to be alone. It is my first necessity after I have a roof to cover me; my next is to have flowers about the house, sociable flowers that can make merry with my friends. For this purpose the sturdy, ever-blooming, more or less conventional geraniums always appeal to me. Shortly after we took Rockgirt, I invested five dollars in choice varieties of ivy and rose geraniums of shades of pink. In winter they are kept in the sun-parlor and in window nooks. They are slipped once a year, the young plants are started in sand, repotted and used for outdoor decoration in summer. So the stock continually increases.

I wanted flower beds close to the house walls, but this was found to be impossible as the house stands literally on a rock with only a few inches of dirt to cover it. When a workman digs a hole he uses dynamite. This seemed a ludicrous way to plant geraniums, so I put them in five large porch boxes hung between each post to a plain porch railing. With much persuasion and top dressing, common woodbine has been induced to grow about the porch posts. By means of the railing, the boxes and vines, a dreary, bare porch that we found at Rockgirt has been converted into a cheerful out-of-door living room at little cost. Each spring white heliotrope and petunia plants are started indoors to put in the boxes with the pink geraniums. The white and pink flower clusters are charming between the green hanging vines. In the winter evergreens are planted in the boxes and form a great shelter from the flying snow.

From the first the woods had received

Better Lawns, Flowers and Vegetables with Wizard Brand Pulverized Sheep Manure

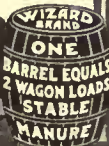
Wonderful results quickly. No weeds or foreign grasses. Economical and convenient to use. Unequalled for lawn, flowers, trees, shrubs, fruit, meadows and grain fields.

\$4.00 per bbl. freight prepaid east of Missouri River. Cash with order. Ask for quantity prices. Write for copy of booklet "Lawn and Garden." Gives valuable pointers.

THE PULVERIZED MANURE COMPANY

25 Union Stock Yards Chicago

Wizard Brand is handled by first class seedsmen



SAMSON SPOT CORD



For Sash Cord. Will outwear common roughly braided cord or metallic devices many times over. The smooth, even braid minimizes abrasion and prolongs wear.

For Clothes Line. Will not kink, stretch or ravel, or stain the clothes, and is guaranteed to last at least five years even when permanently exposed to the weather. Look for our trade-mark, the Spots on the Cord.

Send for samples. Carried by all leading dealers.
SAMSON CORDAGE WORKS, BOSTON, MASS

It Can't Be Heard



It is impossible to hear the flushing of a

SIWELCLO

Noiseless Syphon Jet CLOSET

outside of its immediate environment

If you insist that your plumber install a Siwelclo you will be forever free from the embarrassing nuisance of the old-style noisy closet.



Look for this
Trade Mark

May we send you Booklet 981 T, giving full information?

THE TRENTON POTTERIES CO.

Trenton, N. J., U. S. A.

The Largest Manufacturers of Sanitary Pottery in U. S.

IRON AND WIRE FENCES

Fences of all descriptions for City and Suburban Homes. Write today for our Loose Leaf Catalog, stating briefly your requirements.

Fence Department

AMERICAN WIRE FORM CO.

100 Church Street

NEW YORK CITY



Opens with the Foot

THREE THINGS YOU NEED

FIRST: The only Sanitary method of caring for garbage, deep in the ground in heavy galvanized bucket with bell. Odorless, proof against rats, cats and dogs, or the smaller death dealing pest, the house-fly. Health demands it.

**UNDERGROUND GARBAGE RECEIVER
UNDERFLOOR REFUSE RECEIVER
UNDERGROUND EARTH CLOSET**

SECOND: This clean, convenient way of disposing of kitchen ashes, cellar and yard refuse, does away with the ash or dirt barrel nuisance. Stores your oily waste and sweepings. Fireproof, flush with garage floor.



THIRD: It supplies a safe and sanitary method to keep your water supply safe from pollution. It prevents the danger from the house or typhoid fly, around camp or farm, disseminating its poisonous germs to your family. Hold direct. Send for circulars on each. Nine years in practical use. It pays to look us up.

C. H. STEPHENSON, Mfr.
20 Farrar Street, Lynn, Mass.

A Camp Necessity

their share of attention. The wood road winding through thirty acres, up hill and down, had become the exercise ground for the hill colony. It is understood among our friends that no ferns or flowers growing within sight of the road shall be picked, and all our efforts have been to make the roadside attractive. The first year I studied its natural advantages. The upper road, where the extended view is to be had, is too high and dry to harbor spring flowers, with the exception of the columbine which grows there in quantities, so seeds of wild aster and goldenrod were scattered along the paths. On part of the steep hillside below the path, masses of white boneset flourished; this blooms in September. As the road winds down the hill it comes to "hepatica land." Here anemones, hepaticas and many varieties of violets and ferns are growing.

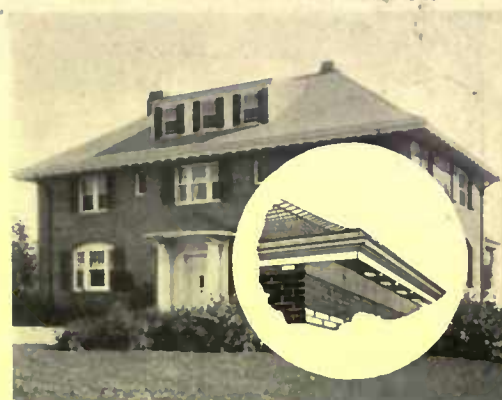
The smell of rich brown leaf mold in early spring is full of promise. It has tempted us to make the woods an experimental station where every seed and plant that can be spared from the town garden is tucked in hopes that it may naturalize. I have discovered that almost any spring flowering plant will thrive in the woods. Mid-summer garden plants often find the woods too shady after the leaves are out, but clematis likes it, and pansies will self-sow. The California bulbs that can be purchased at moderate cost are a novelty in our eastern woodland, and most attractive. California adder's tongue, dog's-tooth violets (*erythroniums*) grow nearly a foot high, with several flowers on a stalk. The different varieties are white, pink, purple and yellow. They will grow in any spot where our native varieties grow. The *brodiaea candida*, a charming light-blue flower has done so well in the wild that I am tempted to try every other early California bulb. *Nemophila maculata*, a small creeping plant with white spotted flowers, and the orange-colored California poppies are two annuals that self-sow each year and bloom for a good part of the summer. Many of our own spring flowering bulbs like the woods. Crocus and squills will do well. I believe, in any place where hepaticas grow. I have grown them both from seed in the woods. It takes three years to mature a flowering bulb from seed. A quantity of immature bulbs of poet narcissus were moved from the garden to the woods and have grown and flowered there. Indeed, whenever a bulb blossoms and matures seed in the town garden, I sow the seed in the woods. In this way time will make the wood road a joy to those who travel it.



The Four Best Evergreens

(Continued from page 107)

parent because pines generally are characterized by stiffness and rigidity. One special merit of the white pine is that it can be established and will grow healthily and



Put Hitchings Indestructible Gutters On Your House

THEY are made of cast iron in two styles. One forms part of the cornice moulding, the other is the regular half round hanging shape. These gutters will not rust out. Outlast even copper gutters. Not affected by salt air or acid conditions. Easy to put up—no soldering necessary. Joints are leak tight and stay tight. Made for all styles of roofs, no matter how many angles and turns. These gutters are the same kind that are used so extensively in England. Many have been in use there over a hundred years. To show you their exact size, shape and thickness, we will send you, at our expense, short lengths of both the moulded face and half round gutters, along with a circular giving complete information.

Write for these samples and circular.



This is the moulded face style. It is made in lengths of 6 feet and is 5 inches wide and 3 deep.

Hitchings & Co.,

Write to our General Office

Spring Street Elizabeth, N. J.

Write for the
Connoisseur Book ON CUT GLASS
TUTHILL CUT GLASS CO.
MIDDLETOWN, N. Y.

PROTECT Your floors and floor coverings from injury. Also beautify your furniture by using Glass Onward Sliding Furniture and Piano Shoes in place of casters. Made in 110 styles and sizes. If your dealer will not supply you Write us—Onward Mfg. Co. Menasha, Wisconsin, U. S. A. Canadian Factory, Berlin, Ont.



NEW YORK BELTING & PACKING CO. LTD
ORIGINAL MANUFACTURERS

INTERLOCKING RUBBER TILING.

**IT IS THE BEST FLOOR MADE
 FOR CHURCHES, SCHOOLS, BANKS, PUBLIC BUILDINGS,
 THEATRES AND PRIVATE RESIDENCES, BEING SANITARY,
 NON-SLIPPERY, SOFT AND COMFORTABLE TO THE TREAD,
 BEAUTIFUL IN COLORS AND DESIGNS AND DURABLE.**

New York, N. Y., 91-93 Chambers Street	Pittsburg, Pa., 933-935 Liberty Avenue
Chicago, Ill., 150 Lake Street	St. Louis, Mo., 218-220 Chestnut Street
Philadelphia, Pa., 118-120 North 8th Street	Portland, Ore., 40 First Street
San Francisco, Calif., 129-131 First Street	Boston, Mass., 232 Summer Street
Indianapolis, Ind., 207-209 S. Meridian St.	
London, England, 13-15 Southampton Row	
Spokane, Wash., 163 South Lincoln Street	

RENEW YOUR LAWN NOW
KALAKA Have a fine lawn by sowing KALAKA, the Wizard Lawn Producer. Comes up like magic. All it needs is soil-moisture. Ideal for new lawns, terraces or to renew old areas. Grass seed and strong concentrated animal manure. Results quick, sure. Cheaper, goes further than ordinary seed. Try it, 5-lb. box for \$1.00, express prepaid East of Missouri River. Write for free booklet, "How to Make a Lawn."—it's full of interesting hints.
 The Kalaka Co., 816 Exchange Ave., Chicago.

Don't Kill all the grass
 on your lawn, but kill each husky weed with a Deadly Dandelion Pill applied with a "Jabstick." No back-ache. **500 Pills and "Jabstick" prepaid \$1.00**
Money back if you are not satisfied.
WILLIAM A. SPINKS & CO.,
362 West Erie Street Chicago.



**WHEN IN BOSTON STAY AT THE
 COPLEY SQUARE HOTEL**

HUNTINGTON AVE., EXETER AND BLADGEN STS.
 A high-class, modern house, intelligent service, moderate prices, pleasant rooms, superior cuisine. Long distance telephone in every room.

Ladies traveling alone are assured of courteous attention.

AMOS H. WHIPPLE, PROPRIETOR.



Have Hitchings Build You a Greenhouse

These greenhouses of ours are regular joy spots that will give you flowers and vegetables all the way around the calendar. Their "up keep" is almost nil compared with an automobile.

And by the way, if you have an automobile, then just attach a greenhouse to the garage and the heating for one will take care of both—a happy thought.

Send for our catalog—we have houses from \$250 up.

Hitchings & Company,

Write to our General Offices
 ELIZABETH, N. J. or

Call at our New York Office
 1170 BROADWAY.

fast, in thin, shallow soils overlying sand and gravel conditions that would mean failure to other evergreens. As a permanent screen tree to shut out an undesirable view this pine, thickly planted, will soon grow up and accomplish the desire.

There are other Western evergreens from the Rocky Mountains destined to fill an important place in our gardens, but the four here enumerated are the essential ones for bold, free planting and good permanent effects.



Gathering and Storing Kitchen Herbs

TO those who devote a portion of the garden to culinary herbs, their gathering and preservation for use during those months when the taste requires a stimulus is an important consideration.

Thyme, savory, parsley, sage and sweet marjoram lend agreeable flavors to winter-roasts and stews.

Herbs should be gathered just before they flower, as leaf and stem are then in their best flavor.

Where the herb garden is in a permanent location such herbs as basil, marjoram, savory, sage and thyme are ready for picking in July. If grown from spring-sown seed, however, they cannot be gathered before September.

The work should be done on a dry day. Gather the herbs by breaking off the



The herbs should be spread upon a wire rack and dried; the leaves are then picked off, ground, and stored away in cans

branches of the plants to a length of five inches. Cleanse them from dust by rinsing them in cold water.

There are two methods of drying. One is to do the work rapidly over a hot fire; the other is a gradual process in the sunshine with a gentle air stirring. There is something pleasantly suggestive in the thought of herbs dried in the soft summer air, but it is sentiment, nothing more. In reality they borrow nothing from the scented breeze. Sun and wind have served their purpose during growth. The better process is that of quick drying. To accomplish this they may be bunched and suspended over the stove, or spread upon a frame of coarse-meshed wire when the

fire is hot and there is no steam, as on baking day. A moderate oven serves the purpose well if the door is left open and the herbs spread upon a wire rack or frame permitting circulation of the air.

When brittle-dry the leaves are picked off and stored in covered bottles or cans. If so desired, it is an easy matter to pulverize them. Lay the leaves upon a pastry board and roll them fine. Sift them through a flour sifter.

Herb powders which blend the flavors of several herbs are convenient accessories to the kitchen stores; for instance, those herbs which are combined into kitchen bouquets, favored by cooks, may be pulverized in this way and mixed in the desired proportions which individual taste determines.

An agreeable blend for flavoring soups or stews consists of one part sweet marjoram, one part thyme, one part winter savory and two parts parsley.



Bringing Wild Flowers Into the Garden

(Continued from page 97)

impossible to find them at any other time than when in blossom. Those which have been named are only a few of the many which can be cultivated in the garden. A walk through the woods cannot fail to reveal many which are equally as deserving as those to which attention has been called.

The Garden of the Small Space

NO one need be deterred from raising a few green vegetables by lack of space. Many things can be grown on a limited amount of ground. The experience of one of my friends proves my assertions.

She lived in a house with but a small plot of ground around it. One morning in the spring when she returned from market with six sturdy tomato plants, the rest of the family laughed at her purchase. In no way discouraged at their jokes at her expense, she planted the tomato vines close up to the back of the house where they could be trained up the wall. They responded lustily to her care, and soon covered it with green vines and leaves. She kept an account and found she had gathered one hundred ripe tomatoes. Some of them were rather small, to be sure, but large enough to count. Besides, she gathered nearly a bushel of green tomatoes in the late fall. She kept the frost from injuring the vines by means of a protection hung in front of her vines at night.

Her success so encouraged her that, this year she has tried more experiments. She planted lettuce at the foot of her tomato vines. By sowing the lettuce seed at intervals of time, she has had a succession of crisp, tender leaves all the season for salads.

Furthermore, she trained some cucum-



HICKS EVERGREENS

THE BEFORE AND AFTER EFFECT OF PLANTING THEM

A stable, for instance, may be ever so well built and finely kept—still it is a stable, and being such, should be screened from view. The illustration below shows one, before it was screened and after our pines and cedars were used. The lines of the buildings being rather attractive, the planting was done in such a way that the roof lines were not obliterated.

Haven't you some such problem that you want solved at once, and overcome a wait of years for trees to grow up? Our evergreens of all sizes will do it for you. We will do the planning and planting if you wish. If you want a few small evergreens or one or two large ones, we have some of the very finest of stock. Good, strong, sturdy trees, every one of them.

If you need 30 good sized ones—better order a car-

load and we will ship them direct from our New England collecting fields. They will cost you, on an average, only \$17 apiece, planted. You cut out double freight and the nursery charges that would otherwise have to be added to the cost of each tree.

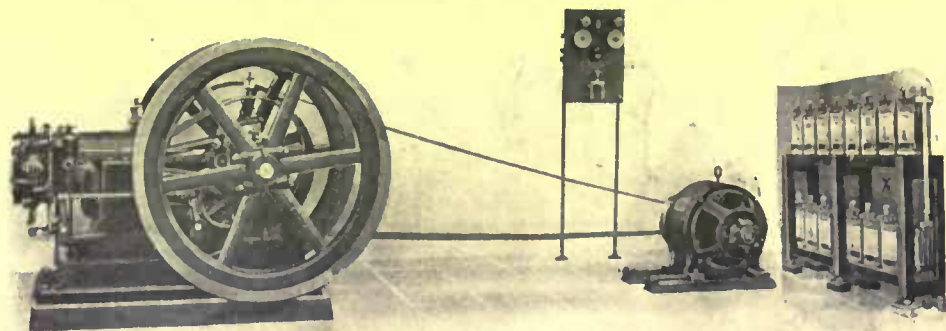
It is important to remember that August and September are among the best of months for the planting of your evergreens. If there are some trees on your place or in the vicinity which you wish were in certain locations of your ground, we can move them for you. It matters not how big they are, we will send a crew of experienced men and special equipment for moving trees of even 40 or 50 tons weight.

Come to our nursery if you can. If you can't, write us and we will send a catalog with our reply.

ISAAC HICKS AND SON, WESTBURY, L. I.



ELECTRICITY?



This outfit, consisting of an Alamo Gasolene Engine and Westinghouse Generator, Switchboard and Storage Batteries, will supply your house with electric lights and power for water systems and all of the modern household conveniences (vacuum cleaners, electric fans, washing machines—in fact anything that operates by electricity).

We also supply water turbines as power for generating electricity, all types of water supply systems and everything electrical and hydraulic for the country home. Write us concerning your proposition, and we will gladly advise you and furnish estimates on installations.

OTIS & WELLS, Electrical Engineers
2 Rector Street, New York City

DURABLE AND ARTISTIC ROOFING



Residence of W. T. Phillips, San Mateo, Cal.
Covered with Meurer's Metal Tile

Meurer's Metal, Spanish and Mission Tiles

The Ideal Roof Covering
made in tin, galvanized and copper

MEURER BROTHERS CO.

MANUFACTURERS

575 Flushing Ave. Brooklyn, N. Y.

WORKS, Washington, Penn.

130 East 129th St., New York City

Pergolas Ready To Set Up



One of our Pergolas as erected

NOTHING so helps the appearance of a garden, or gives the desired character to a house like a well designed pergola.

We ship them in crated sections with simple instructions that will enable

anyone handy with tools to assemble them quickly and easily. Planned by an experienced architect, they are of absolutely correct design and attractive appearance. Price, \$40.00 up.

Our catalog also shows gateways, boundary markers, posts, etc. Send for it today.

The Pergola Company
923 Association Building, Chicago

MOW YOUR HEDGE IN 1/5 THE TIME



Cutting it takes too long. You can mow a 13-inch swath, easily, quickly, with

The UNIQUE HEDGE TRIMMER
Every movement counts! Hedge contractors can quadruple their wages and profits. Workmanship and material indefinitely guaranteed.

Sent prepaid on receipt of **\$5.00**

If not satisfactory after one week's trial, can be returned. Write for booklet.

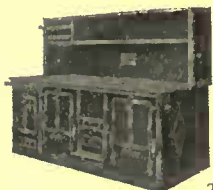
Fountain Cutlery Co., 927 Filbert St. Philadelphia, Pa.

Refer to any bank in Philadelphia.

SAVE YOUR TREES

They are too precious to lose. Get expert surgeons to examine them and advise you as to what they need. Avoid tree fakers and tree butchers. Our free booklets explain tree surgery, the science founded by John Davey. Write for them.

The Davey Tree Expert Co., Inc., 458 Acorn St., Kent, Ohio



One of our many models now in stock.

A Combination Range for Every Purpose

Good for winter cooking with heating; good for summer cooking without heating—the

Deane Combination Coal and Gas Range

Two ranges in one. Has ovens, gridiron broilers, toasters and all other up-to-date features. Gas and coal can be used at the same time when preparing a big meal; or separately as desired. Don't buy any range before calling upon us.

Bramhall-Deane Company,
261 W. 36th St., New York City

Cooking Apparatus of All Kinds

Call or Write for
Our Catalog and
Full Information
on Kitchen Equip-
ment.

A Reasonable Suggestion

Why Not Buy Direct from the Manufacturers?



And get the best as to price, quality and workmanship.

\$4.50

THE NORFOLK CHAIR

(without cushion)

With Arm Rest and Magazine Pocket.

Size of Seat, 20 in. x 20 in. Height of Back, 34 in.

(Shipped on receipt of Money Order or N. Y. Draft)

MINNET & CO., Manufacturers of Willow Furniture

Established 1898

365 Lexington Ave. (bet. 40th and 41st Sts.)
NEW YORK

Richard M. Archer, Mgr. Factory, Carlstadt, N. J.

ILLUSTRATED CATALOGUE SENT ON REQUEST

ber vines up an unsightly trellis and has raised all the green cucumbers she wanted to use.

So don't be discouraged at your surroundings. If a tiny bit of soil is to be had, you can raise a few green vegetables. Where there is a will you can "wiggle out a way."



Establishing Summer Ferns Indoors

(Continued from page 111)

up in the dewy air but taken in before the sun strikes them in the morning.

In filling large jars and boxes it is often necessary to combine several plants of the favored variety *intermedium* or other species, but fronds from several crowns rarely have the desired pose unassisted; this may be deftly done with heavy wire hairpins at the base of the stalk or else supported by branching twigs of the pussy willow; the soft gray catkins and richly colored bark of the varying species of willow are highly effective among the fern fronds, quite worth while for their beauty alone. Ferns of lesser growth which droop over and down are always attractive and often give the needed finishing touch.

The most attractive indoor window box that I ever saw was made an inch or so wider than the low sill on which it rested; it was of galvanized iron and bark covered. Two magnificent ostrich ferns reached almost to the top and nearly filled the window; they were carefully cut out to fit the width of the box after they were perhaps eighteen inches high—as the roots were undisturbed the growth preceded upward for lack of space to expand in the outdoor vase-like way. To prevent breakage because of certain inevitable spreading of fronds, cramped only on the window side, a ribbon guard was tied to brackets half way up on either side. Maidenhair, bladder and Christmas ferns with the delicate bishop's cap and foam flower filled the remaining space in the box. Pussy willows were also on duty for gathering in straying fronds. Nothing in the world of plants so transforms the plainest of rooms or hides as an intelligent and artistic use of native ferns.

For the smaller ferns, especially for table or for use in the endless niches in any home that needs the touch of a wild flower or fern, glass dishes are preferable to all others—the plainer they are the better; if lined with a sheet of moss over an inch of pebbles an artistic effect is obtained. The moss keeps the soil from working down and the pebbles quickly show an over-supply of water which can be drained out. The lining moss should be large enough to turn over the top and be pinned down with invisible hairpins; this prevents too rapid evaporation and makes an attractive finish. An eight-inch glass can quite easily carry a tall maidenhair as centerpiece with *Cystopteris bulbifera*, small Christmas and

Garden Furniture in Marble, Stone and Pompeiian Stone

BEAUTIFUL reproductions of famous models from the gardens of Italy.

WE have no competition in the quality of our work in composition stone.

A VISIT to our studio will prove well worth your time.

OUR catalogue containing more than 800 illustrations of Benches, Sundials, Statuary, Pedestals, Mantels, Vases and Fountains mailed upon request.

THE ERKINS STUDIOS
226 Lexington Ave., New York



Factories { Astoria, L. I.
Carrara, Italy

other ferns clustered about it, and each with the desired "hang" of fronds. Granted that nature is the great artist, she is not above taking a hint or two and subverts with perfect grace.

A most effective finish is the so-called gray moss or even a fluted gray lichen. Stiff growth of this sort is adjustable when thoroughly wet; just enough should be broken away to allow the new fronds to push through without scalping themselves. Young maidenhair with a touch of the Christmas fern above this gray carpet is an exceedingly lovely combination.



A Barrier Against Garden Mud

WHENEVER the weather has been at all damp—which time is, of course, the time when most of the garden hoeing has to be done—I have met with considerable objection on the part of my household regarding the mud that is tracked in



Nailed at the threshold of the garden door is the device that keeps peace in the family during the garden season

over the floors. I have finally discovered a way of preserving peace in the family by means of a combined shoe scraper and brush which is attached to the wooden sill at the bottom of the cellar stairs. In coming in from the garden to leave the tools in the cellar, where they are kept, it is an easy matter to scrape off that portion of the garden that has been brought along.

R. F.



For a Longer Bloom

THE amateur gardener may be interested to know that a second crop of flowers may be obtained from many garden plants whose season of bloom would otherwise be short by cutting away the faded flower heads, and not allowing seed pods to form.

DISTINCTIVE FURNITURE

MADE BY LEAVENS

Simple in
construction and
design,
artistic in
effect.



LEAVENS FURNITURE appeals to all persons of limited or unlimited means, who appreciate good taste displayed in their surroundings.

When buying of us you have practically an unlimited stock to select from. In an ordinary store stock of furniture, the taste and judgment of the "buyer" is exercised first, and you see only such pieces as were selected by him. With us, you have not only the whole output of a factory to select from, but in addition you have the choice of a large variety of finishes.

The idea of allowing the purchaser to select a special finish to conform to the individual taste, is original with us and has resulted in many satisfied customers. We also furnish unfinished.

Send for complete set No. 6 of over 200 illustrations, including color chart of Leavens Standard finishes.

WILLIAM LEAVENS & CO.
Manufacturers
32 CANAL STREET, BOSTON, MASS.

For the homes
of the
discriminating,
at a
moderate cost.





WHEN the ball is snapped into play, twenty-two men leap into instant action. Certainly no ordinary camera lens could capture a picture of that sort. But look at the above photograph, taken with a

Bausch and Lomb Zeiss TESSAR LENS

Every detail is sharp, clear, perfect. Even the ball is arrested in its speedy flight by this still speedier lens. And the Tessar, with its wonderful light-gathering powers, has uniform, excellent definition. It is by far the best all-round lens ever produced—adaptable for all outdoor action pictures, landscapes, indoor portraits and so on. Our Booklet L gives prices and full information as to the best lens for your particular purpose. Sent on request.



Our name, backed by over a half a century of experience, is on all our products—lenses, microscopes, field glasses, projection apparatus, engineering and other scientific instruments.

Bausch & Lomb Optical Co.
NEW YORK WASHINGTON CHICAGO SAN FRANCISCO
LONDON ROCHESTER, N.Y. FRANKFORT



GARDEN TERRA COTTA

The GALLOWAY COLLECTION has been greatly increased for the season of 1911. Send for New Catalogue showing new designs executed in strong, durable TERRA COTTA.

GALLOWAY TERRA COTTA CO.
3214 WALNUT ST. PHILADELPHIA

Appleton & Sewall Company (Incorporated)

Foresters and Surveyors
156 Fifth Avenue, New York City

Practical Methods of TREE PRESERVATION

Tel. 840 Gramercy

Write for Booklet

TRADE MARK TRIUMPH LAWN CARTS

for Gardeners, Fruit Growers, Dairymen, Country Estates, and all outdoors. Made for those who want a good, serviceable, always-ready Cart that saves the lawn and the gardener's time. We manufacture Hand Carts for every purpose. Delivery Carts, open and weather proof. Booklet illustrating our full line on request.



No. 8—Lawn Cart

Removable rack of hardwood strips, 38 x 53 x 8 inches. Box, 27 x 42 x 10 1/4 inches. Side wheels, 30 in., 1/4-in. spokes, 3-in. rims. Built for lawn and garden use. Capacity, 1/4 ton. Shipping weight, 150 pounds.

PRICE, \$25.00

This is by far the finest cart of its kind for the suburban estate. Note the wide tire wheels. Rack can be removed in thirty seconds. Large estates buy these carts in quantities.

From reliable dealers or direct from factory. We allow freight to all points east of the Mississippi and north of the Ohio and Potomac Rivers. Write today for free catalog. Special proposition to dealers. You should write.

**Swartwout
Mfg. Co.**

203 Meadow Street
CLINTON, N. Y.

Triumph Carts are finished in Dark Green Body with Orange Stripping, Red Gears, Hardwood Rack and Handles, natural finish.

Notable success may be had with such plants as hardy Phlox and Sweet William: a new growth quickly follows, and the second crop of flowers is almost as profuse as the first.



The House Fly

A MODERN human interest story should be written, to be read as a part of the summer curriculum in every home, dealing with the housewife and the house fly. In this story the fly should appear as the subject of a relentless and endless war of extermination. In real life, however, the housewife, together with her family, too often plays the role of victim. That is the fly's business, and, too generally, the housewife's fault.

There are two leading propositions to be considered relative to the fly: first, what he is and does, how objectionable and dangerous he is; and, second, how to be rid of him. An acquaintance with the first should lead you to adopt the means of the second.

We have allowed ourselves to complacently regard the fly as a harmless insect that, at most, is a nuisance mostly because of his habits and his persistence. He insists on musing things up in the house when he can get in, and takes an apparent delight in keeping us company at meals, walking over the table things and crawling in and among the uncovered victuals, leaving his disease-germed specks and the imprints of his butter and gravy feet on linen and dishes.

Beyond that, and the fact that he is not an appetizing accompaniment to our repasts, we have never taken the trouble to give him very serious consideration.

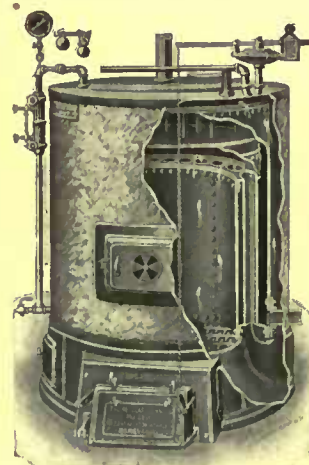
A sweeping holocaust is needed to show us flaws of construction, which may lead to better fire protection. Nothing less than an appalling sacrifice of human life seems sufficient to stir the people and the authorities to adopt means of relief. It required the grievous and calamitous experiences of the camp life of our soldiery of the Spanish-American war to teach us the awakening lesson of the fly's fatal, disease-spreading habits.

During that campaign the fly killed more of our soldiers than the bullets of the Spaniards; more than all other causes combined—more to the extent of eighty per cent.—keeping nine-tenths of the men in hospitals, and killing a thousand to every dozen men who fell in battle. And all this was attributable to the disease germs carried by the common house fly from excreta and other infected matter, to the food in the kitchen tents and the mess tables.

The records of the War Department show that of 133,513 men, 22,420 were sick of typhoid fever, from which 1,924 died. The total deaths from all causes were 2,197. Most of the deaths from other causes than typhoid resulted from dysen-

Heat—A Study

¶ Every present or prospective home owner who is weary of a long effort to solve the Heat-Comfort problem will find the solution of his difficulties in the 38th Edition Catalogue of the Dunning Heating Method.



¶ There is no time like now to locate the germ that caused you so many uncomfortable days last winter and to immediately apply the Dunning prescription.

¶ Following closely the directions of this old practitioner will allay all future heating fears and discomforts.

The Regular
Dunning Boiler
The Heart in the Art
of House Heating

¶ Is a wonderful system of strength, durability and convenience.

NEW YORK CENTRAL IRON WORKS
5 MAIN STREET GENEVA, N. Y.

Landscape Gardening



Prof. Craig

A course for Homemakers and Gardeners taught by Prof. Craig and Prof. Batchelor, of Cornell University.

Gardeners who understand up-to-date methods and practice are in demand for the best positions.

A knowledge of Landscape Gardening is indispensable to those who would have the pleasantest homes.

250 page Catalog free. Write to-day.

THE HOME CORRESPONDENCE SCHOOL
Dept. 276, Springfield, Mass.

tery and kindred bowel troubles, directly traceable in the greater percentage of cases to the germs carried by the flies that bred and swarmed about the camps.

Scientists for years had suspected the fly as a carrier of disease germs. The camp epidemics verified their suspicions.

Our men were sent into the field with every modern device for fighting their enemies—excepting the fly. He was not taken into account. They had to reckon with him later; all because we had not then learned the vital necessity of proper sanitation to prevent the breeding of flies.

That the lesson was learned, and well, was shown by the six months' camp of the 23d Infantry at the Jamestown Exposition in the hot summer of 1907, with only two per cent. of sickness, and with practically no flies or mosquitoes, though located on swampy ground but ten feet above sea level. Intelligent camp sanitation served as the preventive of fly breeding, as well as avoiding development of poisonous germs to be carried by such flies as found their way to this camp.

It was simply an example of the class of sanitation that may be maintained about every suburban and rural home in the country, and that, with proper care and attention, would result in a proportionate lessening of disease.

The fly costs this country about \$500,000,000 annually; which does not take account of the value of the thousands of human lives the fly is responsible for taking. As an instance, it may be cited that in New York City alone there are over 12,000 deaths each year directly charged to the disease-carrying fly. And New York, except along the immediate waterfront where sewage abounds and sanitary conditions are below the average, has only about one fly per capita to every 100,000 to be found in the suburban and country districts.

The breeding place of flies is in filth; horse manure, human excrement, decaying animal matter, rotting vegetables, fermenting garbage and the like. Each pound of such material will incubate about 1,500 flies, repeated every ten days twelve times during the season, or a total of about 40,000,000 to each ton of filth.

On 414 flies from dwelling houses, stables, pig pens and swill barrels, examined between the latter part of July and the last of September, there were found about 500,000,000 disease germs; an average of about 1,250,000 per fly. On 18 flies trapped while feeding about kitchen swill barrels the average was 6,600,000 per fly.

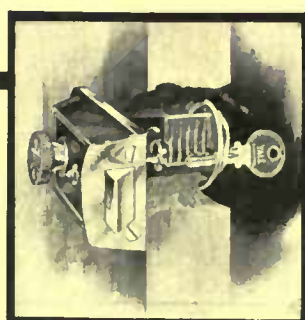
A number of flies kept and caught in a bacteriological laboratory, where cleanly conditions prevailed, were found to be practically free from disease germs; a most conclusive demonstration in favor of cleanliness.

Perhaps the next fly that falls in your coffee may wash off several millions of various kinds of disease germs before he swims to the edge or drowns. Probably he has just been feeding on the rankest

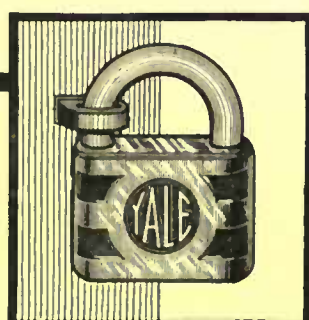
THE MASTER KEY



A Yale Cylinder Lock on a front door



A Yale Cylinder Lock in Night Latch Form
(Door Cut Away to Show Mechanism)



A Yale Cylinder Lock in Padlock Form

YOU may have Yale Cylinder Locks for your house, stable, garage office, works, the drawers in your desk, the locks on your motor-car, your locker at the golf club all "set up" to open with your Master Key. Others may have an individual key which will only open such locks as you wish.

When you buy Locks, Night Latches, Padlocks—or the Hardware for your home or business, remember the security and convenience of the Yale Master Key System.

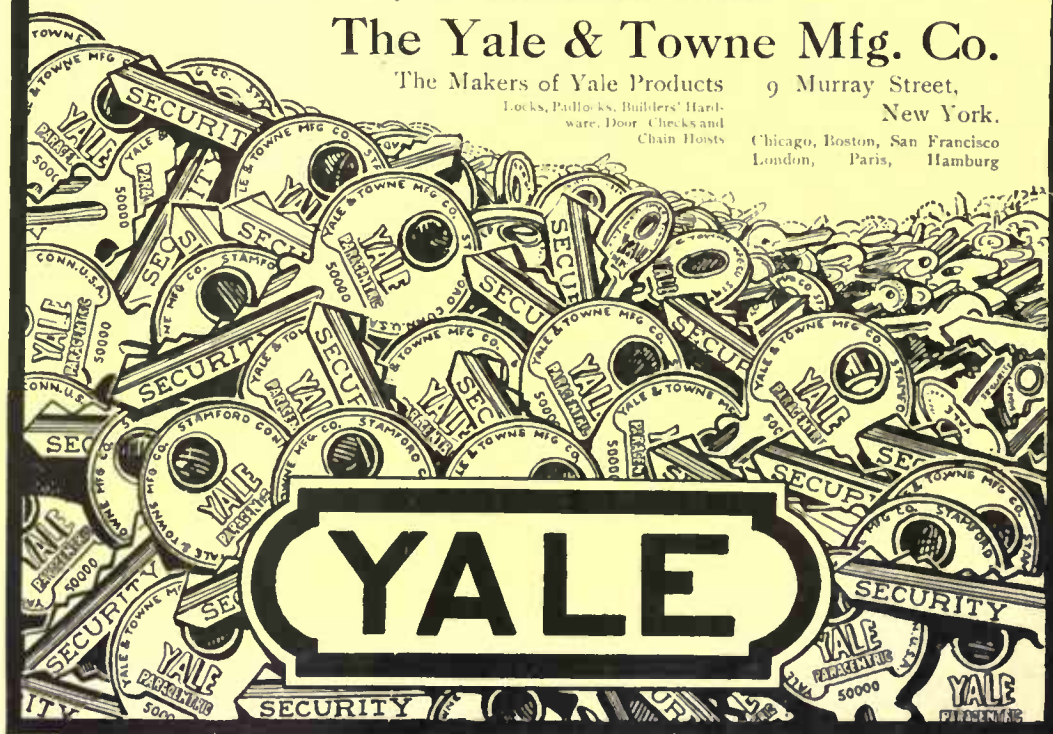
No product is a Yale Product unless it bears our Mark.

Ask us for our book about Yale Products.

The Yale & Towne Mfg. Co.

The Makers of Yale Products
Locks, Padlocks, Builders' Hardware, Door Checks and Chain Hoists

9 Murray Street,
New York.
Chicago, Boston, San Francisco
London, Paris, Hamburg



STEVENS-DURYEA

THE IDEAL MOTOR CAR OF THREE-POINT SUPPORT
Send for Catalogue
Stevens-Duryea Co., Chicopee Falls, Mass.

Gold Medal Paeonies

ON June 10th the Massachusetts Horticultural Society awarded me a gold medal for excellence of cultivation and correct nomenclature in present and past exhibitions. No one can get a higher award.

All the choice varieties in the world, and correctly named. **LISTS FREE.**

E. J. SHAYLOR
Wellesley Farms, Massachusetts

For durable painting of all kinds use National Lead Company's Pure White Lead "Dutch Boy Painter" (trade-mark). Ask for Helps No. 91. Sent FREE on request.

NATIONAL LEAD COMPANY, 111 Broadway, New York

Can Be Used in
HOUSE and GARDEN

Aphine

The Insecticide that kills plant Lice of every species

For flowers and vegetables. Used as a spray. Get it from your dealer or write for particulars to
Aphine Manufacturing Co., Madison, N.J.

PEONIES

Two hundred thousand roots in three hundred of the finest varieties guaranteed true to name.

We offer one and two year old stock; also extra large four year clumps for fall planting.

SEND FOR CATALOGUE AND ORDER EARLY

COTTAGE GARDENS CO., Inc.
QUEENS NURSERIES NEW YORK



THIS IS ONE
of the 40 beautiful homes, illustrated and described in my new book
"HOMES OF CHARACTER,"
with floor plans, exterior views, and accurate cost estimates. Sent postpaid for \$1.00. Descriptive circular 2 cents.
JOHN HENRY NEWSON
Cost \$2,500 1234 Williamson Bldg. Cleveland, Ohio

H. T. DEMPSTER
CARRARA, ITALY
Maker and Importer of Statuary and Decorative Marbles
Designer and Furnisher of Italian Gardens
NEW YORK OFFICE, 39 EAST FORTY-SECOND ST.
CARRARA MARBLE

Smoky Fireplaces

Made to Draw

Your particular chimney problem studied by experts, and estimates given without charge. The work is undertaken with this understanding: **We will not accept payment unless successful.** Kitchen ventilating systems, preventing cooking odors.

FREDERIC B. WHITLEY Engineer and Contractor
215 Fulton Street, Brooklyn, N. Y.

GARDEN



POTTERY

Catalog on Request

**ATLANTIC
TERRA COTTA
COMPANY**

Landscape Pottery Dept.

1170 BROADWAY, N. Y.

MOLES

Killed by the **Brownie Bean**

Send 25 cents for enough beans for small lawn or garden, or \$1.00 for carton containing over 500 beans.
BROWNIE CHEMICAL COMPANY, Bound Brook, N. J.

Hardy Phloxes

are unsurpassed in the garden. I have one of the largest collections of over 250 varieties. Every kind in the market. I also have some very fine Iris, Delphiniums and Hibiscus. Send for list.

W. F. Schmeiske, Binghamton, N. Y.



THREAD and THRUM RUGS 16 FEET

are made seamless, of pure wool or camel's hair, in any width up to

and in any length, color, or combination of colors. 65 regular shades—any other shading made to match. Send for color card.

"You choose the color, we'll make the rug."
Arnold, Constable & Co., Selling Agents, New York
Thread & Thrum Work Shop, Auburn, N. Y.

LEST YOU FORGET

AUGUST is the month you MUST sow PANSIES to enjoy their rich and glorious bloom in your garden next spring.
"Our 'ROYAL mixture' embraces all shades from white to black. We can send you all colors, mixed or separate. Large packet 10 cts., small packet 5 cts.
CLUB together and get 1/4 oz., which will furnish about 20 ten-cent packets, and will only cost you \$1.00.

Plant "Roman Hyacinths" in August if you wish them in bloom for Thanksgiving;

Large bulbs.....	.08	\$.75	\$5.00
EXTRA size bulbs..	.10	1.15	6.00

Ready about August 15th. Price includes delivery. DO NOT FAIL to send for our Fall 1911 Catalogue. IT IS FREE. Address

H. H. Berger & Co., 70 Warren St., New York

filth he could find in stable, sewage or swill barrel.

You don't want that coffee now! Rather an unpleasant thought.

And is it not more disgusting to have these same flies, after their repast of filth, drown in the milk pitcher, drop their specks on the frosted cake, leave a reeking trail over the bread or wipe their slimy feet on the lips of the sleeping baby or the nipple of the nursing bottle?

Screen the doors and windows of your home against the fly, and protect your food so he cannot get to it with his filthy, contaminating feet.

Remove, cover or destroy all the garbage and decaying matter about the premises not less than once a week, so preventing the maggots of the fly to develop.

Where there is no dirt or filth there will be no flies. That fact is well worth remembering—and putting into practice.

At a little summer resort in the mountains, where—it was closed during the winter—all flies were frozen out during severe weather, it is a fact that there were no flies at the opening of the season, and not until a few came up with the horses that brought the summer parties. Noting this, these few flies were killed and all sewage, garbage and refuse was disposed of or treated with chemicals to destroy the means of breeding, and thereafter that place has been absolutely free of flies.

If you and your neighbors will adopt the same methods you may be practically rid of them. If your house is not clean a fly will know it by the odor; and he can detect an odor of filth for miles. Their dislike for clean and pleasing odors is such that it will drive them away.

Should it be impossible to remove or destroy garbage and excreta at least once a week, then keep the vault, manure heap and refuse piles covered with chloride of lime or frequently sprinkle with strong solutions of lye, blue vitriol or crude carbolic acid.

To kill flies in the house, heat a shovel and place thereon 30 drops of carbolic acid; the vapor will kill the flies. Or, dissolve one dram of bichromate of potash to each two ounces of water, add a little sugar, place in shallow dishes and distribute throughout the house. The cheapest and surest exterminator, however, is prepared by placing a spoonful of formalin in a quarter pint of boiling water for each room. The fumes will quickly kill all the flies therein.

But first clean up the premises, inside and out. Then effectively screen the house. There is more health insured by a well screened house than by many a doctor's visit.

RICHARD M. WINANS

An Experience in Remodeling

THE house with the "Pine Tree" in the July number of HOUSE & GARDEN is so like one which it became our fortune to own and remodel that we venture to tell the story of how we met the problem. The house when acquired had little to recom-

"WILLOWCRAFT"

is different from any other willow furniture. There is no "just as good as." The lines are original, cleverly artistic; the material and workmanship insure a lifetime of service and comfort. "Willowcraft" is imitated but never equalled. Look for the "Willowcraft" stamp under each piece of the genuine.

If your dealer doesn't carry the genuine, send for names of "Willowcraft" dealers, illustrated catalogue, and price list.

THE WILLOWCRAFT SHOPS
Box C - - North Cambridge, Mass.



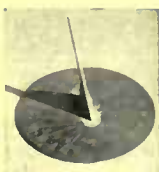
GOING TO BUILD? READ THIS:



FROM NO. 3 BOOK
You will find in our books just the design you are looking for. All PRACTICAL and ESTIMATES ACCURATE.
OUR BOOKS Price
No. 1. 25 designs of residences costing \$1,500 to \$5,000 - - - 50c
No. 2. 25 designs of residences costing \$5,000 to \$20,000 - - - 50c
No. 3. 25 designs of up-to-date concrete residences, costing \$2,000 to \$22,000 - 50c
All three books at \$1.25. Plans furnished at popular prices. We submit Sketches on request for any type of building. Books sent prepaid on receipt of price.
ARTHUR G. LINDLEY CO., Architects, SCHENECTADY, N. Y.
15 Years Practical Experience. References.

SunDialShop

Antiques
Interior Decoration



MRS. HERBERT NELSON CURTIS
22 East 34th Street NEW YORK CITY
TELEPHONE 2970 MADISON



Garden & Porch
Furniture
Rose Temples &
Arbors

Send for new catalog

NORTH SHORE FERNERIES CO.
Beverly, Mass.

Ellen Shipman—Garden Expert
Cornish Hills - New Hampshire

WILL MAKE AND SUPERVISE WORKING
PLANS AND PLANTING OF GARDENS, OR
FOR SMALL GARDENS WILL MAKE SUG-
GESTIONS AND SKETCHES BY LETTER.

P. O. ADDRESS

PLAINFIELD - - NEW HAMPSHIRE

DON'T COOK THE COOK
USE

"ECONOMY GAS"

For Cooking, Water Heating,
and Laundry work, also for
Lighting.

"It makes the house a home"
Send stamp today for "Economy
Way"

Economy Gas Machine Co.
ROCHESTER, N. Y.

"Economy" Gas is automatic, Sanitary and Not Poisonous

Why Not Spend Next Summer
With Your Family On a Farm?

For Sale—Commuter's Farm

Bernardsville, N. J., less than two miles from station. Twenty-six acres delightfully located, gardener's cottage, barn, garage and out-buildings, beside ten-room old-fashioned house; all in good condition.

Artesian well supplies house and barn with running water. Fruit, nut and shade trees. For price and further particulars address:

Farmstead, care House & Garden

mend it to the casual eye. Built perhaps sixty years ago on semi-colonial lines, the interior was found with the exception of the wing to be in fairly good condition. The wing was entirely remodeled.

The dining-room, which was the most dismal feature of the house, is now the most attractive. It extends across the wing and has windows at both ends of the room, east and west.

Back of the dining-room is a butler's pantry, kitchen and storeroom and at the



The small Colonial entrance porch was joined to the veranda and the household comfort was thereby greatly increased

rear of the kitchen is a screened porch which serves as work room and also dining-room much of the summer.

The small windows in the upper story were cut down and reach nearly to the floor. They give plenty of air and ventilation. The front door opened on to the customary small porch, which had neither dignity nor comfort. It was replaced by the veranda, as is shown in the picture.

To the present occupants of the house it is the most enjoyable part of it. An unkept yard and a berry patch have given place to a lawn, shrubbery and a garden—but that is another story.

MARY E. DODGE

The Best Food for Ferns

POT ferns in old, rotten stump dirt, if it is possible to obtain it from the woods, for this is their natural soil. Keep them damp most of the time, leaving them continuously in a place where they get no wind and but little direct sunlight. Then about once in two or three weeks water with this solution: A half-teaspoonful of niter of potash dissolved in a gallon of water. (A smaller quantity may be made in the same proportion.) Put this around the roots rather than on the green fronds as it would scald them if too strong. This is the solution used in greenhouses, and nothing is better, according to florists.

An Oversight

DUE to a mistake, no appropriate credit was given Mr. Lawrence Visser Boyd, the architect of the "House in the Peach Orchard," which began the July number. Mr. Boyd's work has appeared in HOUSE & GARDEN from time to time, and we regret that readers were not apprised of the fact that this house was also his work.



12-Day Vacation Cruise \$60.00 UP

Berth and Meals Included
(First Cabin) To—

HALIFAX Nova Scotia
and
ST. JOHN'S New Foundland

Offered by the

RED CROSS LINE

Old World Scenes and Experiences in North America.

Novelty, grandeur, delightful climate, charming sea voyage, absolute comfort and economy are combined in this cruise—no hotel expenses, changes or transfers; you live on the ship; it is your home for the trip.

The splendid large and powerful S. S. Stephano (new) and popular S. S. Florizel (in commission) give the tourists seven days at sea and five days in port (2½ in Halifax and 2½ in St. John's).

These new steamships are remarkably steady at sea, have every modern equipment for safety and comfort, sail every Saturday at 11 A. M. during summer and fall.

We also offer a booking from New York to Montreal. Thence via Black Diamond S.S. Line down the wonderful River and Gulf of St. Lawrence, stopping at Quebec, Charlottetown, P. E. I., and Sydney, C. B., thence to St. John's, N. F., and back to New York via Red Cross Line, at \$65.50 up.

Send for handsome
illustrated booklet 30

BOWRING & CO., 17 State St., New York

THORBURN'S LAWN GRASS SEEDS

Containing a mixture of the finest grasses: Quart 25c.
2 quarts 45c. 4 quarts 80c. Sent prepaid by mail to
any address in the United States. Dept. 2.

J. M. THORBURN & CO., 33 Barclay Street
New York

Ornamental Foliage Plants

We make a specialty of choice collections for greenhouse as well as everything in the line of decorative trees and plants.

Visit our nurseries or send for descriptive catalogue of Nursery Stock and Greenhouse plants.

Experienced and Competent Gardeners

Any lady or gentleman requiring their services can have them by applying to us. No fees. Please give particulars regarding place.



ALOCASIA ARGYREA

Julius Roehrs Co., Exotic Nurseries, Rutherford, N. J.



PRICES marked in plain figures will always be found **EXCEEDINGLY LOW** when compared with the best values obtainable elsewhere.

GEO. C. FLINT CO.

43-47 W. 23rd ST.

24-28 W. 24th ST.

U-ALL-NO

AFTER DINNER MINT

is a delicious confection at any time—pure, fresh, dainty—no mint candy is so grateful to the palate.

*Sold only in tin boxes
Never in bulk*

We also manufacture

**U-All-No
Mint Chewing Gum**
MANUFACTURING CO. OF AMERICA
463 North 12th St.
Philadelphia, U. S. A.



*"The most interesting romance for Americans is
America's own story."*

A History Of the American People

By

WOODROW WILSON

Ph.D., Litt.D., LL.D.

Former President of Princeton University

DO you know that Woodrow Wilson has written the most scholarly and most readable narrative History of the United States that our country has yet produced?

The History is in five volumes, is profusely illustrated with maps, plans, pictures, etc., and is written with such delightful grace of style that, with all its authority, it reads like an enticing romance. Woodrow Wilson put half a lifetime of research into this great work; and the result is a wonderful picture of the growth of our country from the days of Columbus down to the accession of Theodore Roosevelt.

The object of this advertisement is to make to you a special half-price offer. You may have the books at just half the regular price; you may send them back to us if you don't like them, and you may have a year's subscription to Harper's Weekly (or Harper's Magazine) included without any additional payment.

The price is **\$12.00**, including the periodical, and the entire five volumes come to you as soon as you send us **\$1.00**. It's a great chance.



WOODROW WILSON

HARPER &
BROTHERS
Franklin Square
New York

Gentlemen: Please send me, all charges prepaid, A HISTORY OF THE AMERICAN PEOPLE, Five Volumes, Cloth Binding, subject to ten days' approval, and also enter my subscription

to HARPER'S.....
for one year, for which I enclose \$1.00 and agree to send you \$1.00 a month until the total price, \$12.00, is paid, if the books are accepted by me.

H. G. S.

Name.....

Address.....

The most perfect series of maps in color ever published, showing the territorial growth, political changes, and general development of the United States. There is a full-page portrait of every president from Washington to Roosevelt, facsimile reproductions of rare manuscripts, state papers and governmental records, together with numerous illustrations by Pyle, Remington, Fenn, Chapin, Christy, and many others. The books are bound in a manner befitting the importance of the work. A high-grade paper has been used and no expense spared.

A NEW EDITION IN FIVE VOLUMES

Prepared with a view to popularizing this great work.



The Planting of Large Trees

The planting of large trees has been done more or less for years, but the result has not been altogether satisfactory. For the last few years the demand for large trees has been increasing, especially where one wishes immediate effect, so that for shade, screening and barren places, it has made the demand for large trees much greater.

Before entering into this branch of the work, we looked carefully into all the different appliances and machines for moving the large trees, and, after seeing the work of the different machines, and watching the result of the transplanting, we found that the Ryder Machine is the best in every respect.

The secret of success in large tree-moving is to move the tree as quickly as possible, with the proper amount of dirt on the roots, in proportion to the size of the tree. This our machine does, whether the earth is frozen or not.

We are not the inventors of this machine, but have adopted this one, as we found it the best.

It is much easier and cheaper to remove the dirt from the roots, but it is not successful. We are prepared to furnish estimates on moving or furnishing large trees. The price for moving or furnishing these trees varies from \$50 up, according to the size, location, how far they are to be moved, also the condition of the ground.

THE STEPHEN HOYT'S SONS CO.

Incorporated
NEW CANAAN, CT.

Interior Decoration

Interior decorations of all descriptions planned and executed. Single rooms or whole houses furnished, and wall coverings, hangings, rugs, furniture, etc., selected to suit any scheme. Out of town orders carefully attended to. Lamp and candle shades. Stenciling.

MISS THROOP—MISS VEERHOFF
37 EAST 60th STREET :: NEW YORK



GARDEN ORNAMENTS

This Pompeian stone fountain designed and erected by us in the formal gardens upon the estate of Mr. J. B. Van Vorst, Hackensack, N. J., represents the character of artistic work we are doing in marble, stone and Pompeian stone.

Our catalogue S, containing more than 800 illustrations of fountains, benches, sundials, statuary, pedestals, mantles and roses mailed free on request.

ERKINS STUDIOS,

226 Lexington Avenue New York City
Factories—Astoria, L. I.; Carrara, Italy.

**“YES, I ADMIT
I’M GETTING
INTERESTED IN**

CYPRESS

“THE WOOD ETERNAL”

**“I ALSO ADMIT THAT
IT WON’T DO ME MUCH
GOOD UNLESS I INSIST
ON GETTING CYPRESS
& NO SUBSTITUTES.”**

CYPRESS DEFIES ALL ROT INFLUENCES.
Get your CYPRESS (“and no substitutes!”) from your nearest Lumber Dealer. Write our “All-round Helps Dept.” TODAY. Tell us your plans—and needs—and we’ll send free at once the Vol. of Cypress Pocket Library that fits your case. (Full of VALUABLE POINTERS.)

So. Cypress Mfrs. Assn. DEPT. 1210 New Orleans, La.

**“THE WOOD
THAT LASTS
SHALL BE FIRST.”**



Write Quickly for Vol. 18 of the famous Cypress Pocket Library with complete Specifications and Working Plans (that you can build from) of this \$3,000 CYPRESS HOME.



Sent free by our “All-Round Helps” Manager.
So. Cypress Mfrs. Assn. DEPT. 1210 New Orleans, La.

**DON’T COOK THE COOK
USE**

“ECONOMY GAS”

For Cooking, Water Heating, and Laundry work, also for Lighting.

“It makes the house a home”
Send stamp today for “Economy Way”

Economy Gas Machine Co.
ROCHESTER, N. Y.

“Economy” Gas is automatic, Sanitary and Not Poisonous



**“STOP DEPRECIATION
BEFORE IT BEGINS—
USE CYPRESS AT 1st.”**

“Do you like this style of a home instead of a Bungalow? — Then Let’s Get It!”
Complete Working PLANS and Detailed Specifications FREE in Vol. 29

**CYPRESS
POCKET
LIBRARY**



Write our “All-Round Helps” Manager for it TODAY
So. Cypress Mfrs. Assn. DEPT. 1210 New Orleans, La.



**“AS SIDING (CYPRESS)
PRACTICALLY WEARS
OUT BEFORE IT DECAYS.”**

—U. S. Gov’t Rept., Bulletin 95, June, 1911

Complete Specifications and Working Plans of THIS CYPRESS Five-Room, \$1650 BUNGALOW sent FREE on request.

Write TODAY just say you’d like Vol. 6



Any vol. of the CYPRESS POCKET LIBRARY and personal advice if you write “All-Round Helps.”
So. Cypress Mfrs. Assn. DEPT. 1210 New Orleans, La.

So That Everyone May Buy

“The Standard of Proper Style



High Quality and Good Value”

JOSEPH P. McHUGH & CO.

(Established 1878)

- Forward Freight Free to any Point in the United States, prepaid purchases amounting to twenty-five dollars or over, or
- Give free seat cushions for chairs with all prepaid orders; freight charges to be paid by buyers, or
- Ship on receipt of five dollars, money order or N. Y. draft, the McHugh Bar Harbor Cushioned Arm Chair, or
- Mail for 45c. in stamps (allowed on first order placed for McHughwillow Furniture) the full Portfolio of Pen Sketches and fixed Pricelist, or
- Send postpaid without charge, the Illustrated Booklet and loose leaf pictures of the McHughwillow Furniture in grouped effect.

Correspondence is Cordially Invited.

9 WEST 42d ST., at FIFTH AVE.
Opposite the New Public Library,
NEW YORK.

(Only Address Since 1884)

NO AGENTS, NO BRANCHES, BUT
SATISFIED CUSTOMERS EVERYWHERE



LIMBERT'S Holland ARTS & CRAFTS

BEAUTIFUL NEW STYLE BOOK MAILED FREE
Send for it today and read its interesting history of this charming style from the 15th Century to the present time. It illustrates over 300 patterns of our Holland-Dutch Arts & Crafts and “Flanders” Furniture, and shows—with colored plates of model Arts & Crafts rooms, what tasty and harmonious effects can be obtained at small expenditure.

WRITE FOR OUR STYLE BOOK
before selecting any more furniture—it will show you just what you want—furniture that is artistic and comfortable, and made so well that it will serve several generations. Ask your local dealer to show you “Limbert's Arts & Crafts,” and see our trade-mark branded into the wood. If he cannot supply you, send us his name and we will send you the address of our associate distributor nearest you.

CHARLES P. LIMBERT COMPANY
Grand Rapids, Mich. Dept. K Holland, Mich.



Country for Sale

The Real Estate Department of House & Garden will be glad to advise its readers in regard
This service is given without charge. Address Real Estate

**THOMAS
N.
COOKE**

REAL ESTATE AGENCY \$10,000.00

Will buy a Farm of 46 acres, one mile from Greenwich Country Club, over good road. Land consists of meadows, pasture and woodland with natural site for lake. There are other distinct elevations for building sites, with excellent cross country view.

Select Country Homes—Shore Fronts—Acreage and Farms

**Greenwich,
Conn.**

**Telephone 430,
SMITH BLDG.**

IN HYDE PARK, EAST ORANGE

An exceptional opportunity to purchase a well-built home on a beautiful, tree-shaded, quiet street in the best residence section. The house, on a plot 40 x 105 ft., has nine rooms, bath, pantry and store room. Heated by hot air. Unexcelled water. Fine schools and neighbors. Has been occupied only by owners and is in first-class condition, with good wall papers and garden border. Peach and cherry trees. Fifty trains daily to New York, ferry or tube. Price \$7,500; easy terms.



For further information address H. H. S., House and Garden, 449 Fourth Ave., New York.

FOR SALE

A beautiful farm 3½ miles from Binghamton, on Conklin Road, farm consists of 40 acres River flats, has an abundance of pure water. A young orchard of fancy fruit of all kinds, is one of the best market garden farms in Broome County, or would make an elegant country home.

MRS. C. B. Weld, R. F. D. 1, Binghamton, N. Y.

FOR SALE

Fine plot—75 x 100—Lake Section of Brightwaters, Bayshore, Long Island.

For Particulars Address,

Cleveland N. SWEET New York

Princeton "The town beautiful"

The ideal home town—no manufacturing, no objectionable features. Handsome residences, beautiful landscape. Convenient to both New York and Philadelphia—fast trains.

Rentals \$300 to \$6,000 yearly. Furnished homes also for rent.

Town and country properties—furnished or unfurnished—for sale or rent, in other desirable localities.

WALTER B. HOWE, Princeton, N. J.
New York Office, 56 Cedar Street



"Edgemont Estate" At Scarsdale Station

The ideal realization of out-of-town living. A delightful home community, for all-year residence. Protected social environment, the charm of the country, all city improvements. Immediately at station, only 19 miles on Harlem Elec. Div. N.Y. Cent. R.R. Special advantages to be secured for those building during the present season.

Write for Booklet A

Scarsdale Company

J. Warren Thayer, Pres.
Scarsdale New York 503 Fifth Ave
New York City



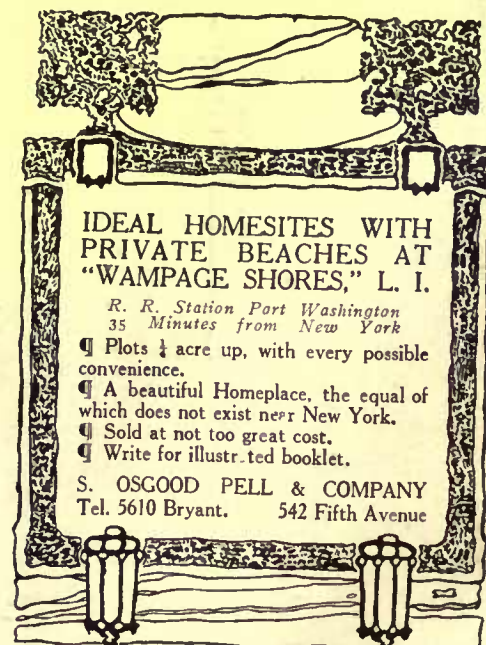
Why Not Spend Next Summer With Your Family On a Farm?

For Sale—Commuter's Farm

Bernardsville, N. J., less than two miles from station. Twenty-six acres delightfully located, gardener's cottage, barn, garage and out-buildings, beside ten-room old-fashioned house; all in good condition.

Artesian well supplies house and barn with running water. Fruit, nut and shade trees. For price and further particulars address:

Farmstead, care House & Garden



IDEAL HOMESITES WITH PRIVATE BEACHES AT "WAMPAGE SHORES," L. I.

R. R. Station Port Washington
35 Minutes from New York

Plots ¼ acre up, with every possible convenience.

A beautiful Homeplace, the equal of which does not exist near New York.

Sold at not too great cost.

Write for illustrated booklet.

S. OSGOOD PELL & COMPANY
Tel. 5610 Bryant. 542 Fifth Avenue



WHEN IN BOSTON STAY AT THE COPLEY SQUARE HOTEL

HUNTINGTON AVE., EXETER AND BLADGEN STS.

A high-class, modern house, intelligent service, moderate prices, pleasant rooms, superior cuisine. Long distance telephone in every room.

Ladies traveling alone are assured of courteous attention.

AMOS H. WHIPPLE, PROPRIETOR.

Property and Rent

to the purchase, sale or rental of country and suburban real estate in all parts of the country.
Department, House & Garden, 449 Fourth Avenue, New York City.



Gentle- man's Estate

For Sale or to Rent, at a very reasonable price, a delightful estate about one mile from the Greenwich Station, commanding a fine view of the Sound. 5 acres of land, with lawns, gardens and shrubbery, in choicest section of town. The house has 6 master's rooms, 5 servants' rooms and 4 baths, with every modern improvement. Excellent Stable and Garage, with accommodations for coachman and family. For further particulars, address,

LAURENCE TIMMONS

Opposite N. Y., N. H. Depots

GREENWICH

CONNECTICUT



KALAKA The Wizard Lawn Producer

Mixed seed and fertilizer that comes up where everything else failed. All it needs is soil and moisture. Cheaper than common seed. 5 lb. box express prepaid east of Missouri river \$1.00, or west of the river for \$1.25. Our instructive booklet, "How to make a lawn," FREE. Written by experts; solves every grass problem—a big help. Send for it tonight.

The Kalaka Co., 816 Exchange Ave., Chicago, Ill.
Union Stock Yards

Don't Kill all the grass

on your lawn, but kill each husky weed with a Deadly Dandelion Pill applied with a "Jabstick." No backache. 500 Pills and "Jabstick" prepaid \$1.00

Money back if you are not satisfied.

WILLIAM A. SPINKS & CO.,

362 West Erie Street

Chicago.



HOTEL CHAMBERLIN At Old Point Comfort, Virginia

September is a most delightful month here

If your vacation has been delayed till now, here is an ideal place to spend it. The even climate of Old Point guarantees freedom from cold, damp nights, which at this time of the year mar the evenings at most mountain and lake resorts.

No flies—no mosquitoes. At The Chamberlin you will enjoy Autumn's splendors without Autumn's discomforts.

All attractions—golf, tennis, fishing, dancing—choose your favorite recreation—enjoy it to the full under ideal conditions.

The Chamberlin is situated right in the centre of military and naval activities—at Hampton Roads and Fortress Monroe, and in the very heart of a section teeming with historic association.

Special Low Summer Rates still in force.
For Booklets and full information, address

GEO. F. ADAMS, Manager, Fortress Monroe, Va.

New York Office, 1122 Broadway



HOMES at SHORT HILLS

In New Jersey's Most Exclusive Residence Section

Near BALTUSROL GOLF CLUB and
CANOE BROOK COUNTRY CLUB

Invigorating mountain air; broad outlook; pure, unfailing water supply; all city improvements. Forty minutes, express trains.

We Build for You
from your own plans,
or you can build for yourself.
Convenient terms arranged.
Write today.

Distinctive Houses
ready and building.
Can be changed in interior plan and finish to suit your individual taste



ROCHE
CRAIG
& WILEY

165
Broadway
New York
Suite 1303



FOR SALE

This new Colonial residence in unsurpassed location on North Shore of Long Island, close to and overlooking the water, with fine view of Bay and Sound.

Thirteen miles from Pennsylvania Terminal. House has ten rooms besides Entrance Hall, Laundry, Pantry, 3 baths, 15 closets, 3 open fireplaces. The Colonial style has been maintained throughout the interior, and the design, construction and finish throughout are equal to the best class of residence work. Will sell cheap.

FOR TERMS, ETC., WRITE TO

A. F. EVANS

125 E. 23rd Street

Hunt Big Game

Don't hesitate because inexperienced. Go this year, while there are still a few places left where you will see game that has never been hunted and have your hunting all to yourself. I can show you Mountain Sheep, Caribou, Moose, Grizzly Bears, in a country where no other white man has ever been and the game has not become dwarfed from the conditions which always arise after hunting is started. I make all arrangements, and personally manage expedition, preserve trophies, etc., as hunter companion; advise as to purchase of fire-arms and cameras and give instruction in shooting and wild game photography. References.

Address:— C. T. S.

Care of House & Garden



POULTRY DEPARTMENT

The purpose of this department is to give advice to those interested in poultry. The manager will gladly answer any troublesome questions. Address "Poultry Department" and enclose a self-addressed envelope.



ONE OF THE SIGHTS IN OUR PARK

We carry the largest stock in America of ornamental birds and animals. Nearly 60 acres of land entirely devoted to our business.

Beautiful Swans, Fancy Pheasants, Peafowl, Cranes, Storks, Flamingoes, Ostriches, Ornamental Ducks and Geese, etc., for private parks and fanciers. Also Hungarian Partridges, Pheasants, Quail, Wild Ducks and Geese, Deer, Rabbits, etc., for stocking preserves. Good healthy stock at right prices.

Write us what you want.

WENZ & MACKENSEN

Proprietors of Pennsylvania Pheasantry and Game Park

Dept. "H. G." Bucks County, Yardly, Pa.

G. D. TILLEY

Naturalist

Rare Land and Water Birds

Swans, Geese, Ducks, Peafowl, Cranes, Pheasants, etc. I am the oldest established and largest exclusive dealer in ornamental birds in America.

**G. D. TILLEY, Naturalist
DARIEN, CONNECTICUT**

BUFF ORPINGTONS

*Are the Greatest
Utility Breed*



To make room for growing stock I will dispose of this year's breeders at very attractive prices.

Now is the time to arrange for your next season's Pens—I have quantities of exceptional chicks to choose from.

"Champion New Yorker"
1st Prize Cock at
Madison Sq. and Boston
1911

Stock and Eggs for Sale

JOE-PYE

South Norwalk, Conn.,
R. F. D. 37

The "Joe-Pye Book," 20
pages illustrated, sent
on request

Baby Chicks of Quality

Sent by Express Direct to You

Why bother with eggs? I can supply you with healthy young chicks at once and guarantee them to reach you in good condition. Fishel Strain White Plymouth Rocks, S. C. R. I. Reds. Prices reasonable.

Chick Catalogue Free.

R. C. CALDWELL, Box 1030, Lyndon, Ross County, Ohio



RABBITS AND PET STOCK

Unrivalled Flemish Giant, Angora, Tan and Polish Rabbits—Peruvian and Smooth Cavies for fancy or pets.

Some Good Youngsters now for sale, \$1.00 up
ELM COVE RABBITRY, Great Neck, L. I.

Maplecroft Rhode Island Reds

win at all the leading shows. "It pays to buy the best." Stock and Eggs for sale in large quantities. Send for Circular and Mating List of S. C. Reds. J. G. Dutcher, Prop. Address

Maplecroft Farms, Pawling, New York



White Orpingtons

They lay like slot machines

Beautiful white chickens for the lawn, as useful as they are ornamental.

Lawrence Jackson

Box H, Haysville, Allegheny County, Pa.

Getting Rid of Poultry Lice

AN extra effort should be made to rid the poultry house of lice before the cold weather sets in, for the gray louse—red when filled with blood—is one of the worst of the poultry vermin, and spends its time on the hens in winter, instead of seeking refuge under the roosts, as is its habit throughout the summer. While the weather is warm these lice prey on the birds only at night, allowing them to remain in comfort during the day, but in winter they are always at work. For that reason it is well to remove the roosts in September and saturate them thoroughly with kerosene, having a care that the liquid penetrates every crack. The kerosene should also be used on the supports which hold the roosts, as well as in the nesting boxes. One of the liquid lice killers may be used in place of kerosene.

The white lice, which swarm all over the poultry house if not held in check, and which often get on the attendants, are best exterminated by using whitewash or by spraying the house with kerosene or a lice-killer with a spray pump. A pump makes it possible to drive the liquid into all the cracks and corners. When whitewash is used, it should be very thick and is best applied with a broom, for even the roof should not be neglected. Crude carbolic acid—half a cupful to each pail of the mixture—will make the whitewash bath doubly efficacious.

There is one other kind of louse, a long, yellow fellow, which remains on the hens all the time. As a rule, this louse does not multiply very rapidly and causes little trouble if the hens have an abundant opportunity to dust themselves in dirt or ashes, the latter only when loam or sand is not available. Loam is preferred by the hens to light sand. Persian insect powder may be dusted into the plumage if these body lice seem numerous. E. I. F.

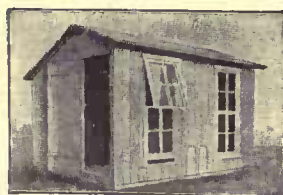
The Causes of Shellless Eggs

WHEN shellless or very soft-shelled eggs are found under the roosts, it is well to examine the latter to make sure that they are as wide as they should be. If so narrow that the hen has difficulty in maintaining her balance, shellless eggs are often laid as a result of the bird's struggles to keep her position. The roost should be flat, two or three inches wide, and slightly rounded on the upper corners.

Soft-shelled eggs often result from improper feeding. The daily rations should include green food of some kind and grit as well as oyster shells should be supplied if the birds are kept in confinement. If running at liberty, they probably will get enough grit. Indeed, hens on range seldom lay shellless or soft-shelled eggs. Condiments or other stimulating foods tend to cause the laying of imperfect eggs, as does a ration which causes an accumulation of fat, although this explanation is more often to be looked for in the case of hens one or more years old than in that of pullets. Pullets, when frightened, lay shellless eggs. E. I. F.

DON'T BUILD

A \$40.00 HOUSE



Potter Portable Poultry Houses Style "A" 5-8x10 foot house, complete with 8-foot Potter outfit, \$40. Many other styles and sizes.

you. Mailed for two red stamps to cover postage. Write today and be convinced that Potter Poultry Products are for particular poultry people. We also make portable auto houses. Catalogue mailed on request.

Potter & Company, Box 77, Downers Grove, Illinois

You can buy better, cheaper, more complete ready (factory) made hen-houses, roosting and nesting fixtures, coops, etc., from Potter & Co., because they have been making these goods for ten years and know how.

Complete : Convenient : Sanitary

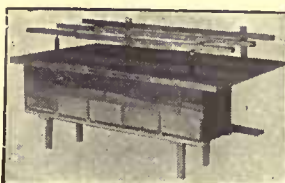
Potter Portable Houses and Fixtures have these good points, as thousands of users testify. Potter goods are A1 in quality and low in price. They are made for a purpose and save you time and labor in your poultry work.

Satisfaction Guaranteed

when you buy our goods. They are made right and do please our customers. No lice and mites when you use our vermin-proof roofs and nests. For your own pleasure and profit and for the sake of your hens, you cannot afford to be without Potter fixtures.

OUR TWO CATALOGUES—(136 pages, 150 illustrations) on portable houses and coops, fixtures, feed hoppers, trap nests, feeds and supplies of all kinds at lowest prices, will interest you. Mailed for two red stamps to cover postage. Write today and be convinced that Potter Poultry Products are for particular poultry people. We also make portable auto houses. Catalogue mailed on request.

A \$5 Hennerly Outfit



No. 16, 5-foot two-perch Potter outfit, price \$5. Made in 12 sizes.

Thorburn's Bulbs

Hyacinths, Darwin and other Tulips, Narcissus and Crocus, Easter Lilies and hardy Japan and Native Lilies. English, Spanish and Japan Iris. Freesias, Calochortus and Trilliums, and all other Native and Foreign Bulbs and Roots in endless variety.

The Largest Assortment in America

CATALOGUE NOW READY
MAILED FREE FOR THE ASKING

J. M. THORBURN & CO.
33 Barclay Street Box 2 New York

Appleton & Sewall Company (Incorporated)

Foresters and Surveyors
156 Fifth Avenue, New York City

Practical Methods of TREE PRESERVATION

Tel. 840 Gramercy Write for Booklet



SO SIMPLE A CHILD CAN OPERATE IT

SHARP ROTARY ASH RECEIVING SYSTEM

Do away with unsightly ash barrels—the inconvenience and drudgery of ash disposal. No piling of ashes on the cellar floor—no furnace dust in your living rooms. All waste matter is contained in removable, strong, iron cans with the ashes in cement-lined vault. All odors and dust go up the chimney. Mechanically perfect—a practical solution of the ash and garbage nuisance. Guaranteed to give satisfaction.

EASY TO MOVE ASHES IN PORTABLE CANS
The Sharp Rotary Ash Receiving System can be installed in any building, old or new, under any style of House-Heating Furnace or Boiler, before or after it is in operation. Ashes fall directly into strong iron cans that revolve easily as filled.
Endorsed by Health Officers, Architects and Heating Contractors. Worth while to investigate before you complete your building plans.
Write Today for Illustrated catalog of practical demonstrations and testimonials. Dealers' and Architects' names appreciated.
W. M. SHARP COMPANY
217 Park Ave. New York City



Holds 6 to 10 weeks' ashes, removal of which is no effort.



KENNEL DEPARTMENT

The purpose of this department is to give advice to those interested in dogs. The manager will gladly answer any troublesome questions. Address "Kennel Department" and enclose a self-addressed envelope.

PRIZE WINNING STOCK

English Toy Spaniels, Prince Charles, Rubys, Blenheim
From Prize Winning Stock. Low to close

WILLOUGHBY KENNELS, NORFOLK, VA.

TOY WHITE FRENCH POODLES, young and grown stock. Pedigreed. Prices reasonable. Also Toy Spitz Pomeranian pups. Write your wants.

MRS. G. C. ROHDE,
Ann Arbor, Mich.



IRISH TERRIER PUPPIES

of both sexes. All from the very best stock.

For particulars address

CLOVERLY KENNELS

West Chester, Penna.

FOX HOUNDS BIRDSONG and WALKER STRAINS

sent on ten days' trial. Drag packs for hunt clubs a specialty; guaranteed to please. Get my liberal guarantee. Also a few coon dogs and several youngsters for sale.

R. F. Johnson, Assumption, Ill.



Boston Terriers

We have a number of exceedingly high-class puppies, sired by "Ch. Lord Bell Rock," and other prize winning lightweights, for disposal, satisfaction guaranteed.
For a house dog or companion, the Boston Terrier is in a class by himself. Prices from \$20.00 up.

WINCHESTER KENNELS
119 Winchester St., Toronto, Ont.
Ch. LORD BELL ROCK, at Stud. fee \$15

Pointers and Setters

WANTED TO TRAIN ON GAME. PLENTY GAME. TRAINED DOGS FOR SALE

W. GEORGE SMITH

K. 9 Kennels, Maryland, Md.

A GENTLEMAN going abroad wishes to dispose of 2 champion bred imported Airedale bitches imported at a great expense. 7 months old; if sold at once will accept \$30 each. Apply

THOMAS BAYES, Maasillon, Ohio

Send For a Sample! "Osoko"

The Paramount Dog Food. It contains all that is necessary for condition, stamina and the greatest nourishment for every type of dog.

H. A. ROBINSON & CO.

Importers

128 WATER ST. NEW YORK CITY
Address Dept. H

SHEILD PONIES



An unceasing source of pleasure and robust health to children. Safe and ideal playmates. Inexpensive to keep. Highest type. Complete outfits. Satisfaction guaranteed. Illustrated catalogue free.

BELLE MEADE FARM
Box 10, Markham, Va.

AM BOOKING orders now for an elegant litter of puppies whelped July 19th.

WALTER McROBERTS
Peoria, Ill

(Member Irish Setter Club of America)

Russian Wolhounds

The Best Dog in the world and one of the Rarest Breeds extant. Peerless in beauty and reliability of disposition. Companions for gentlemen, ladies or children.

CATALOGUE "H"



Mirasol Kennels

Pasadena, California

Sale of Pekingese

RETURNING TO ENGLAND

AMERICA'S BEST PUPPIES

Reds, Sables and Parti-colors. Also Brood Matrons and Adult Dogs. Price from \$50. Must be Sold.

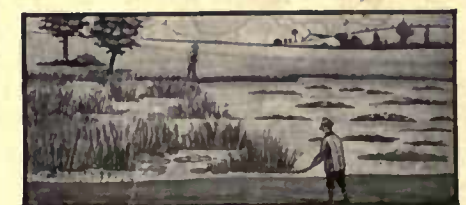
AI-GEE KENNELS Hartsdale, N. Y.

Phone, 1031 White Plains

FOR SALE

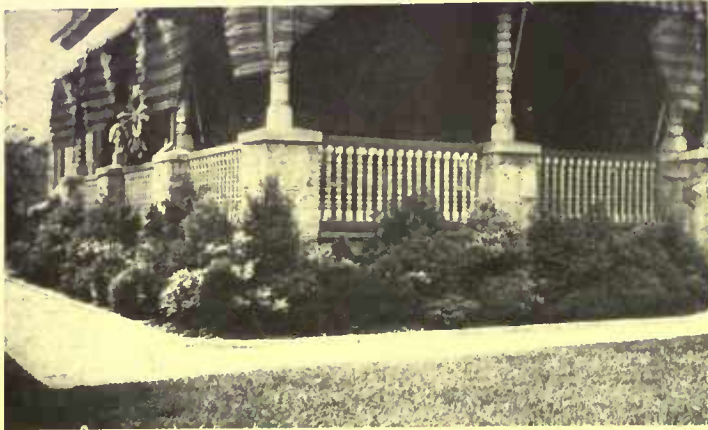
Twenty-two Choice Collie Pups, Sire, Ormskirck, Artist and other good ones.

W. H. GRAY, Brookville, Pa.



FOR summer resorts which want clean bathing places, sporting clubs where weeds interfere with power boats, ponds or lakes where ice is harvested or any water where weeds are undesirable—Zieman's Submarine Weed-Eating Saw is indispensable. Easily operated from the banks or on greater lakes just as well from boats and very large spaces cleared in shortest time. Write for illustrated circular which explains how it works and good references.

ASCHERT BROS., Cedar Lake, West Bend, Wis.



Moon's Evergreens For Autumn Planting

will soften bare angular lines of porch and house foundations.

Why not do away with costly beds of tender flowers about porch and house foundations, by planting dwarf Evergreens that will permanently hide these bare unattractive walls? Besides abolishing the cost and trouble of putting out tender plants you have an attractive all year decoration that doesn't pass away with the coming of Winter or need renewing with the advent of Spring. Think this over now as your flowers are about to be nipped by frost and write us about an Evergreen planting that will be permanent.

Evergreens are one of our specialties. We have 300 varieties and over 100 acres devoted exclusively to this type of trees. We have sizes from 1 to 20 feet and no matter what the use you have for Evergreens whether for hedging, windbreaks, groups or individual planting, it will pay you to see what our collection affords. Send for catalog—"MOON'S HARDY TREES AND PLANTS FOR EVERY PLACE AND PURPOSE."

The Wm. H. Moon Company

MAKEFIELD PLACE, MORRISVILLE, PA.

PHILADELPHIA OFFICE: 21 SOUTH 12TH ST.

SunDialShop

Antiques
Interior Decoration



MRS. HERBERT NELSON CURTIS

22 East 34th Street

NEW YORK CITY

TELEPHONE 2970 MADISON

ANTIQUE FURNITURE

Rare China, Pewter,
Old Lamps, Andirons, Etc.

NO REPRODUCTIONS

HENRY V. WEIL

698 Lexington Avenue

Cor. 57th Street

New York



THE POSSIBILITIES OF THIS GREENHOUSE

HERE is just a suggestion of what it will do for you. On one side bench you could have tomatoes trained up the roof—on the other side, cucumbers. In the center bench, half to butter beans and the other half to strawberries in pots. And then there are the flowers—the countless flowers you could have. There's an indoors garden plot for you that means much lip smacking.

And you can have any of them practically any time of the year—that's the beauty of gardening under glass. This house is made of our Iron Frame Construction because it's the most satisfactory way. Lasts longer—grows better plants. Send for our catalog which gives a detailed description of this house and some fifty others.

HITCHINGS & COMPANY

Write to our
General Offices: ELIZABETH, N. J.

Or call at our
New York Office: 1170 BROADWAY



Opens with the Foot

THE STEPHENSON
PATENT

THREE THINGS YOU NEED
FIRST: The only Sanitary method of caring for garbage, deep in the ground, in metal receiver, holding heavy galvanized bucket with bail. Odorless, proof against rats, cats and dogs, or the smaller death dealing pest, the house-fly. Health demands it.

UNDERGROUND GARBAGE RECEIVER
UNDERFLOOR REFUSE RECEIVER
UNDERGROUND EARTH CLOSET

SECOND: This clean, convenient way of disposing of kitchen ashes, cellar and yard refuse, does away with the ash or dirt barrel nuisance. Stores your oily waste and sweepings. Fireproof, flush with garage floor.



THIRD: It supplies a safe and sanitary method to keep your water supply safe from pollution. It prevents the danger from the house or typhoid fly, around camp or farm, disseminating its poisonous germs to your family. Nine years in practical use. It pays to look us up. Sold direct. Send for circulars on each.

C. H. STEPHENSON, Mfr.
20 Farrar Street, Lynn, Mass.

A Camp Necessity

Samson Spot Clothes Line



SOLID BRAIDED COTTON
Strong, Durable, Flexible

Will not kink, stretch, ravel, nor stain the clothes. Guaranteed to last at least five years, even when permanently exposed to the weather. Can be distinguished at a glance by our trademark, *The Spots on the Cord.*

Send for sample. Carried by all dealers, or write to us.
SAMSON CORDAGE WORKS. BOSTON, MASS.



ALOCASIA ARGYREA

Ornamental-Foliage Plants

We make a specialty of choice collections for Greenhouse as well as everything in the line of decorative trees and plants.

Visit our nurseries or send for descriptive catalogue of Nursery Stock and Greenhouse plants.

Experienced and Competent Gardeners

Any lady or gentleman requiring their services can have them by applying to us. No fees. Please give particulars regarding place.

Julius Roehrs Co., Exotic Nurseries, Rutherford, N. J.



THE PERGOLA

HARTMANN-SANDERS COMPANY

Send for catalogue No. P-27 of Pergolas, sun dials and garden furniture, or P-40 of wood columns.

HARTMANN-SANDERS CO.

Elston & Webster Avenues, Chicago, Ill.
East. office, 1123 Broadway, New York City

Exclusive Manufacturers of

KOLL'S PATENT LOCK JOINT COLUMNS

Suitable for Pergolas, porches and interior use.

It
Can't
Be
Heard



Why are you continually embarrassed by your noisy toilet when your plumber can free your home of this nuisance by installing a

SIWELCLO

Noiseless Syphon Jet

CLOSET

Its flushing is so perfect it cannot be heard outside of its immediate environment.



Look for this Trade Mark

Send for Booklet No. 981T

It shows just why this is possible in the Siwelclo and no other.

THE TRENTON POTTERIES CO.

Trenton, N. J., U. S. A.

The Largest Manufacturers of Sanitary Pottery in U. S. A.

MURRAY & LANMAN'S
Florida Water

"THE UNIVERSAL PERFUME"

Is unique in quality and universal in popularity. It cannot be replaced by any of its imitators. For the bath, for use after shaving, as a rub-down after exercising, and for general dressing-matchless. Its fragrance is permanent, and during especially, Murray & Lanman's Florida Water is truly a necessity.



ACCEPT NO SUBSTITUTE!
SOLD BY ALL LEADING DRUGGISTS

Sample mailed on receipt of six cents to defray mailing charges.

LANMAN & KEMP, 135 Water Street
New York

NEW YORK BELTING & PACKING CO. LTD
ORIGINAL MANUFACTURERS
INTERLOCKING RUBBER TILING.

IT IS THE BEST FLOOR MADE
FOR CHURCHES, SCHOOLS, BANKS, PUBLIC BUILDINGS,
THEATRES AND PRIVATE RESIDENCES, BEING SANITARY,
NON-SLIPPERY, SOFT AND COMFORTABLE TO THE TREAD,
BEAUTIFUL IN COLORS AND DESIGNS AND DURABLE.

New York, N. Y., 91-93 Chambers Street	Pittsburg, Pa., 933-935 Liberty Avenue
Chicago, Ill., 150 Lake Street	St. Louis, Mo., 218-220 Chestnut Street
Philadelphia, Pa., 118-120 North 8th Street	Portland, Ore., 40 First Street
San Francisco, Calif., 129-131 First Street	Boston, Mass., 232 Summer Street
Indianapolis, Ind., 207-209 S. Meridian St.	
London, England, 13-15 Southampton Row	
Spokane, Wash., 163 South Lincoln Street	

"Willowcraft" Furniture

represents a step in advance in Willow furniture. The high character of material and workmanship insures a lifetime of unimpaired service. "Willowcraft" is preferred where beauty and utility are considered essentials, whether for use in winter homes, bungalows or camps.

If your dealer doesn't carry "Willowcraft" furniture bearing the "Willowcraft" stamp, send for names of dealers who do, also illustrated catalogue and price list.

THE WILLOWCRAFT SHOPS

Box C.,

NORTH CAMBRIDGE, MASS.



NO DELAY TO GET THE CLOTHES DRY ON WASH DAY

When using the "CHICAGO-FRANCIS" Combined Clothes Dryer and Laundry Stove. Clothes are dried without extra expense, as the waste heat from the laundry stove dries the clothes. Can furnish stove suitable for burning wood, coal or gas. Dries the clothes as perfectly as sunshine. Especially adapted for use in Residences, Apartment Buildings and Institutions. All Dryers are built to order in various sizes and can be made to fit almost any laundry room. Write today for descriptive circular and our handsomely illustrated No. 12 catalog. Address nearest office.

CHICAGO DRYER CO. OR SHANNON MFG. CO.

630 So. Wabash Ave., CHICAGO, ILL.

124 Lexington Ave., NEW YORK CITY

P E O N I E S

Two hundred thousand roots in three hundred of the finest varieties guaranteed true to name.

We offer one and two year old stock; also extra large four year clumps for fall planting.

SEND FOR CATALOGUE AND ORDER EARLY

COTTAGE GARDENS CO., Inc.

QUEENS

NURSERIES

NEW YORK

The MOVING and PLANTING of LARGE EVERGREENS

AUGUST AND SEPTEMBER are the best months for doing this work. But to insure successful results and the life and growth of your valuable trees, they should be entrusted only to skilful and experienced hands.

We have been doing large landscape work for years. Our success and experience are measured by the many fine estates we have designed and planted.

We have skilled landscape architects to work with you in planning your place, and the most efficient mechanical equipment obtainable; while our nurseries (planted for more than half a century) enable us to furnish choice trees of any size and species, either for large plantings or to match trees already in place.

Let us tell you the story of the interesting planting below—one of many carried out successfully by us during recent years.

Inquire for Catalogue D

THE STEPHEN HOYT'S SONS COMPANY

(Established 1848)

New Canaan, Conn.

(Incorporated 1903)



Do Not Go Through *Another* Summer Without Trees and Shrubs

Suffering from the heat *because* of a lack of pleasant shade and comforting shrubbery isn't necessary. The trees and shrubs are ready for you—after years of patient growing. It is your fault if they are not about your home, for you could have them placed there. Life is too short for one to set out a twig, after his home is built, and wait for it to become a tree—Nature works too slowly for that. But you can secure trees and shrubs that are large enough to give you a landscape without waiting.

The Growing of Trees is an *Art*—Transplanting Them is a **SCIENCE**

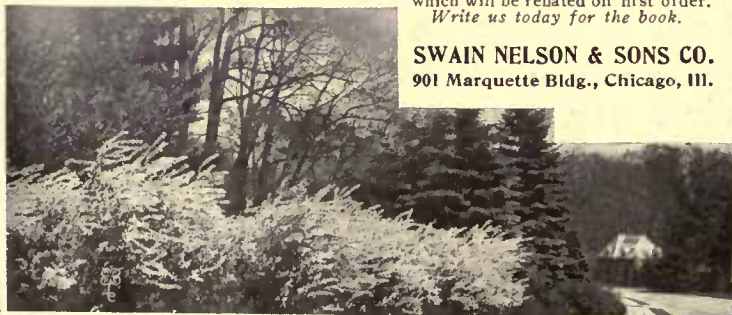
Swain Nelson & Sons Co., engaged in raising and transplanting trees and shrubs, have been in business for a long time. They understand the art of growing things, and they transplant scientifically. All of their stock is carefully grown. Attention is paid to root development, to shape and to vigor. The soil in which the plants are started is *important*. The protection the young plants receive is *MATERIAL*. The manner in which they are transplanted from time to time, so they will adapt themselves to changed conditions, is *VITAL*. All these things have been properly looked after in Nelson's Glenview Nurseries.

LANDSCAPES WITHOUT WAITING REQUIRE SPECIAL FACILITIES AND SPECIAL KNOWLEDGE

Something more is involved than digging a hole and setting a plant. Swain Nelson & Sons Co.'s experts visit your premises if desired, determine the size and character of trees and shrubs best adapted to the place, select the proper location for them, remove them from their great nurseries and place them where they will shelter you and add beauty and value to the home. Fine, large specimens are always chosen. A business reputation stands back of every transaction, and the company cannot afford to make a failure. Nothing is undertaken that cannot be successfully carried out, and no contract is too large for execution. Handsome Book, "Landscape Without Waiting," explaining many points in landscaping and tree planting, will be sent free on application to any home owner within 500 miles of Chicago. To others fifty cents, which will be rebated on first order.

Write us today for the book.

SWAIN NELSON & SONS CO.
901 Marquette Bldg., Chicago, Ill.



FARR'S PEONIES, IRISES, AND HARDY PLANT SPECIALTIES.



If the iridescent beauty of the Iris makes you a dreamer of far-away things, that of the Peony awakens you to the joy of life and the glory of June.

Everybody loves the Peony—only a few really *know* how beautiful are the modern ones, "The Aristocrats of the Hardy Garden." For twelve Junes I have lived with my Peonies, each blooming season filling me with a new wonder and admiration for their glorious flowers. All the Junes of a lifetime are too short to intimately know them all.

Nowhere in the world is there such another collection of Peonies. So *large* that it includes almost every distinct variety of merit from the oldest to the newest; so *small* that there is no room for the commonplace.

My New Book of Peonies, Irises and Hardy Plant Specialties

is unique, in that the Peony list has been entirely written to conform to the official descriptions of the American Peony Society, the notes being prepared in the field while the plants were in bloom, and the colors were accurately determined by the Society's official color chart. In short it tells you in condensed form all that is known about Peonies, and will guide the beginner in the selection of a few varieties for a small garden, as well as the connoisseur in filling out his large collection.

This book is free on request from all interested in a hardy garden, though too expensive for promiscuous distribution. Send for the book now, for you should plant early, so that the roots will make a fall growth, thus gaining a year's time and producing blooms next June.

I know every inch of the amateur's road, and can be of practical help to you if you write me freely about your gardening troubles, for the famous collection of plants comprising Wyomissing Nurseries, are but the outgrowth of a tiny "Boy's Garden" in the West—a hobby developed into a business.

BERTRAND H. FARR, WYOMISSING NURSERIES, 643 F PENN ST. READING - PA.



CONTENTS

SEPTEMBER - 1911

COVER DESIGN: THE SMOKE HOUSE STUDIO.
Oswald C. Hering, architect

CONTENTS DESIGN: FALL ANEMONES
Photograph by Nathan R. Graves

FRONTISPIECE: THE HOME OF ERNEST GUILBERT
Photograph by H. H. S.

HOMES THAT ARCHITECTS HAVE BUILT FOR THEMSELVES.....	147
The Home of Ernest Guilbert, Forest Hills, N. J.	
By P. A. Huntington	
A ROUND-UP OF THE BEST PEONY VARIETIES.....	151
By Henry H. Saylor	
NEW WAYS OF CONTROLLING ELECTRICITY IN THE HOME.....	154
By Katharine Newbold Birdsall	
THREE EXPERIENCES WITH LILY POOLS.....	156
By Dorothy and Lois Willoughby	
"YAMA-NO-UCHI"	158
By Robert Allister	
THE PROPHET'S CHAMBER.....	162
By Lydia Le Baron Walker	
STORING VEGETABLES AND FRUIT.....	163
By M. Roberts Conover	
THE SIMPLE ARTS OF BUDDING AND GRAFTING.....	164
By Claude H. Miller	
A REVOLUTIONARY IDEA IN FLOORING.....	166
By J. C. Taylor	
WHAT TYPE OF HEATING?.....	168
By Charles K. Farrington	
GROWING THE MILKWEED FOR FOOD.....	169
By Grace Aspinwall	
A BULB THAT WILL PROLONG THE FALL GARDEN.....	170
By Florence Beckwith	
A COMBINATION HOTBED AND STORAGE PIT.....	171
By Richard Maxwell Winans	
INSIDE COLONIAL DOORWAYS.....	173
FACTS AND FIGURES IN CONNECTION WITH OUTSIDE PAINTING.....	174
By George E. Walsh	
THE HOME OF RUFFIN A. SMITH, RIVER EDGE, N. J.....	176
John A. Gurd, architect	
THE TRANSFORMATION OF TWO STONE BUILDINGS ON THE ESTATE OF W. E. HERING, ABINGTON, PA.	177
Oswald C. Hering, architect	
INSIDE THE HOUSE.....	178
Brittany Pottery	Suggestions to Users of Electricity
	Care of Screens
GARDEN DEPARTMENT	180
Shrubs	Making the Garden Path
	House Plants
EDITORIAL PAGE	182
Poultry Roosts	Buying the Dog
What to do for the Lawn in the Fall	Care of Cut Flowers

VOLUME XX NUMBER 3.

Copyright, 1911, by McBride, Nast & Co.

HENRY H. SAYLOR, EDITOR.

McBRIDE, NAST & CO.

449 FOURTH AVENUE,

NEW YORK CITY

Robert M. McBride, President; Condé Nast, Vice-President; Robert F. MacClelland, Secretary; Henry H. Saylor, Treasurer. Published Monthly. 25 cents per Copy. \$3.00 per Year. For Foreign Postage, add \$1.00; Canadian, 50c. Entered as Second-class matter at the Postoffice, New York, N. Y.



The home of Mr. Ernest F. Guilbert, Forest Hill, N. J.—Guilbert & Bettelle, architects

It is seldom indeed that one finds in a modern home of comparatively moderate size a room of such magnificent proportions. The rough, dull warm gray of the plaster walls above the wainscoting forms an ideal background for the tapestries and old velvets that are hung upon it.



House & Garden



VOLUME XX

September, 1911

NUMBER 3

Homes That Architects Have Built for Themselves

I.—THE HOME OF MR. ERNEST F. GUILBERT IN FOREST HILL, A SUBURB OF NEWARK, NEW JERSEY—A DUTCH COLONIAL TYPE WITH AN UNUSUAL LIVING-ROOM

BY P. A. HUNTINGTON.

Photographs by H. H. S.

[The charge is frequently made that the layman when building his home is timid regarding the incorporation of features that would give his house individuality, preferring rather to hold to the conventional thing in the fear that he will get something bizarre. In houses that architects build for themselves we should see the results of unhampered design. This is the first article in a series; other examples will appear in future issues.—EDITOR.]

I HAVE very much the same feeling in seeing a new house that is aroused by meeting a stranger. In either case there is the first rapid appraisal of the subject as a whole, then the sharp lookout for those features, mannerisms or idiosyncracies that go to make up individuality. Just as one type of man leaves an absolutely colorless impression on one's mind, without the least desire to meet him again, so does a house fail to awaken the faintest flutter of interest in the mind of the visitor. The pity of it is that the vast majority of houses fall into this class, lacking even a simple feature that would serve to show a personality behind the design or the furnishing. And for this very reason—the prevalence of the commonplace—a house that really has something to show you, some expression in materials that proclaims an idea or an ideal that house arouses in you a feeling of appreciative satisfaction very similar to that resulting from a meeting with a man like Theodore Roosevelt, Thomas Edison, Gilbert Chesterton, or any other man of strong personality.

And, fortunately, these houses of distinct individuality are not confined to any one class, locality or size. You may find one at Lenox, stately in its broad acres, but you are just as likely to come upon a far humbler sister in a little country lane. Neither



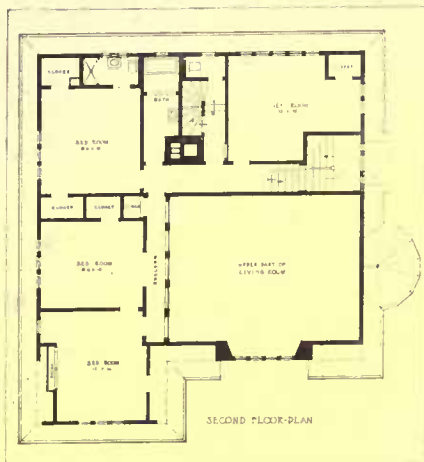
The exterior is of the pliable Dutch Colonial type, the broad gambrel roof coming down to the top of the first-story windows

size nor expense seems to have anything to do with the matter. Frequently, indeed, you will find the costliest materials used with the worst possible taste, or, on the other hand, the least expensive woods given a treatment that indicates the fullest appreciation of their particular sort of beauty, lifting them high above the plane of ordinary things.

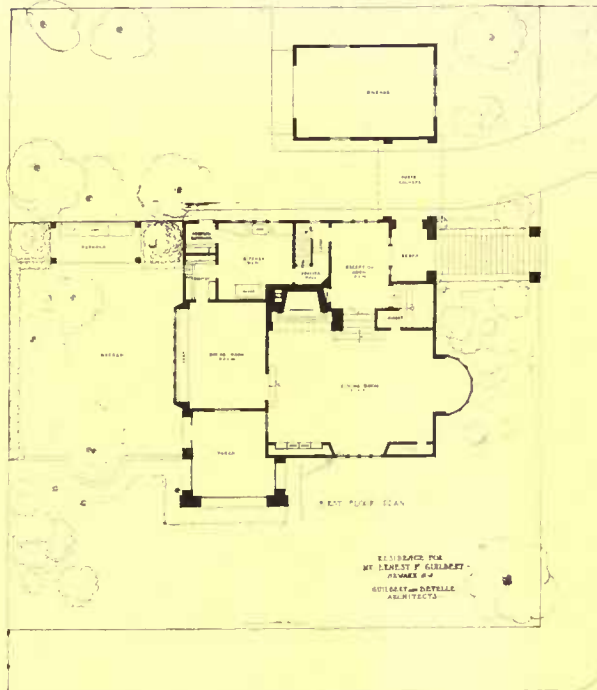
While, as I have said, you need not expect to find houses of character in any one class, there is no doubt whatever that if you wanted to find one in a hurry you would save time by looking up first the homes that architects have built for themselves. The chances are that you will find what you are seeking before you have looked through many of these.

Of course, the reason is not far to seek. In designing his own home the architect is hampered in no way—unless it be on the score of expense—in carrying out the ideas that his training and experience have shown him

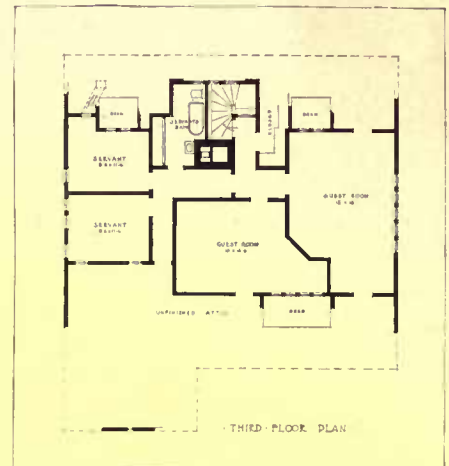
to be most desirable. Probably he has a number of pet schemes up his sleeve that have been worked out for past clients who have been too timid to allow anything out of the ordinary to appear in their future homes. At the same time, the architect, if, as is most likely, he is a man of refined tastes, will have no desire to produce a



The narrow gallery leads to the two guest rooms on the second floor



The great living-room, 21 x 31 ft. without the bays, and 18 ft. high, is the focal point around which the whole house has been built



One of the two large "guest rooms" may be adapted to use for billiards

house that is merely a curiosity—a house to be pointed out with a shrug and a smile by all the neighbors.

Probably the architect will, at the outset, look for a piece of property that, because of its steep grade, or other apparent difficulties, has remained unsold, though in a good locality. There are opportunities of this kind in every town, and the architect, by reason of his knowledge that such difficulties are easily overcome, is quick to see that he is not only securing a bargain, but also one of the most important elements to give his home individuality—an irregular site.

Mr. Ernest F. Guilbert's house, in Forest Hill, N. J., is one that impresses upon you its individuality as

soon as you get the first glimpse of it, up under the shelter of its great trees, on a steep hill. There is a house you want to know intimately, and which, once known, will have a lasting place among your house friends.

Mr. Guilbert's desire was to have a large living room, but otherwise to keep the house as small as possible. The property is level—100 x 117 ft.—is from eight to fifteen feet above the sloping streets. The entrance was therefore placed on the less important street to minimize the steps, also to allow the principal frontage to be occupied entirely by the dining-room and the large family porch opening upon the lawn, as will be seen in the accompany-



In approaching the house one comes up a rather steep hill and passes the side of the house before turning a corner at the right to find the entrance at the far end of the plot on the side street. The large opening in the near corner indicates the tile-paved porch which is screened in in summer and glazed in winter



Mr. Guilbert has indicated in a little pencil sketch the treatment of a property adjoining his own house



In another sketch the garage appears at the right-hand side just beyond the entrance steps and joined to the house by an arch

ing plans. The reception room is very small, with a low ceiling, and from this room an entrance to the living room is made interesting by descending five steps through a deep recess. You find yourself in a room eighteen feet high.

This Jacobean room is very simple in design, except that it contains an ornamental gallery of the English baronial halls, which serves as a corridor to reach a portion of the second floor bedrooms. The ceiling falls slightly from the center to the side walls and is divided into large panels, with small moulded beams. The seven-foot wainscoting is framed in a way that avoids the expense of panel construction, showing a very effective use of inexpensive materials. At one corner of the room is the great fireplace, seven feet across the opening, nearly six feet high and about four feet deep. The brick



It is in the great living-room that one feels most strongly the individual appeal of Mr. Guilbert's home. At the far end may be seen the gallery, which is patterned after the musicians' galleries of English baronial halls



A long row of casement windows, and the wide seat, occupy almost one whole side of the sunny dining-room. Beyond lies the tile-paved porch, which is reached also from the living-room

hearth is four inches above the floor. It is interesting to note that this great cavern requires a flue more than two feet square, and on a cold winter night, with a half dozen four-foot logs, well burned to coals, gives a cheer not hard to imagine.

The woodwork of the room is chestnut, stained a warm, dark brown, and waxed. The floor, of oak, is a little darker than the chestnut. On walls and ceiling the plastering, to imitate the old work, is very rough, being done with a small, round-edged trowel. It is painted in water color—a dark, warm gray wall, with a light gray ceiling, affecting age rather than color. Needless to say, this makes a splendid background for the tapestries. The chandeliers are of old silver.

In the dining-room, the color scheme is in old, delft blue and yellow, with a red Welsh quarry tile floor. A



The fireplace at one corner of the great living-room is large enough for one to walk in under the Tudor arch. The flue necessary to make it draw properly is over two feet square

long row of casements and a seat, nearly occupy one long side of the room. From this, and from the living-room as well, opens the family porch, about fifteen feet square. It faces the best view, is exposed to the prevailing summer breezes, is far enough from the entrance to be private, and is fifteen feet above the street, therefore as secluded as could be desired.

There are four bedrooms on the second floor and two baths; on the third floor, a large bedroom and billiard room, also two servants' rooms and bath, and large stock closet.



At one side of the living-room, directly opposite the stairs leading down from the reception room, is a great leaded glass window reaching almost to the eighteen-foot ceiling

The basement contains a laundry, vegetable room, photographic dark room, furnace and coal storage space.

The kitchen, pantries, rear hall, etc., are ample, and are provided with a red composition floor that is ideal for such quarters, being very sanitary and easily cleaned. All the service portion of the house is in white wood, natural finish, while all the master's portion, except the living-room, is in cream white, with single-paneled doors, in dark mahogany.

One will notice the hardware particularly, the old-fashioned thumb-latch handles, placed rather higher than the usual knob level.

All windows are casements, opening out, with screens on the inside. A lever oper-



The individuality of Mr. Guilbert's home extends even to the cement sidewalk with its border of brick

ates the window from inside the screen.

That most interesting and pliable style, Dutch Colonial, marks the exterior of the house, with low walls and gambrel roof. Twenty-four-inch shingles are used as a wall covering, laid eleven inches to the weather and dipped in white shingle stain, afterward brush-coated with the same stain. The roof shingles are stained a dark gray-green that soon turns to a color that looks like a very old shingle.

Mr. Guilbert feels that his efforts have been best complimented by a stranger, an old gentleman, who told a neighbor that the house was "all right, but too old fashioned."

A Round-up of the Best Peonies to Plant Now

THE EMINENT DESIRABILITY OF THIS HERBACEOUS PERENNIAL—WHEN AND HOW TO PLANT—THE OPINIONS OF PEONY GROWERS AS TO THE BEST TEN OF THE ALMOST INNUMERABLE VARIETIES

BY HENRY H. SAYLOR

Photographs by N. R. Graves, Chas. Jones and the Author

ONE frequently comes upon the statement that if such and such a person were to be exiled to an uninhabited island for the remainder of his life he would choose to take with him such and such a book. Merely as a form of emphasis, and trusting that such a choice will never be thrust upon me, under the same circumstances I believe I should choose, among the thousand and one flowering plants, the peony. Admitting the difficulty of a choice between this and the rose, I hold that the scales would turn in favor of the former, for on an uninhabited isle I should have far too much to do to find time to keep up the necessarily incessant warfare against the rose's many enemies. The peony, on the other hand, by reason of its freedom from disease and the attacks of insect pests would bring only the rewards of its wonderful beauty and fragrance.

It should need no argument to convince anyone who has had even the least experience in trying to obtain presentable borders or masses of planting around the house, that the great bulk of dependence should be put upon the perennials. It is merely an aggravation to spend hours in planting seeds of annuals in carefully arranged plots, only to find, in midsummer, that many of them have not come up at all and that others have brought clashes of color into the scheme that should never have occurred. On the other hand the perennials, such as the peony, foxglove, larkspur,

phlox, and such other old standbys, may be depended upon absolutely to come up year after year in the same place and in the same colors.

Admitting the superiority of the perennials, why should so much stress be laid upon the peony? It is a difficult task to hold a brief for any one flowering plant; there are so many others that may lay claim to superiority in one or more particulars. It would be foolish, therefore, to



Marechal MacMahon, a deep rich red, illustrates one of the most beautiful types—a cup-shaped bloom with broad guard petals forming a saucer. The white bloom is Festiva Maxima, probably the most popular white, with carmine edges on the central petals. Incidentally, it is also one of the cheapest to buy.



A two-year-old dormant root ready to go into the ground. The pinkish eyes are barely visible at the top

advocate the use of any one flowering plant to the exclusion of others, but what I do want to do is to emphasize as strongly as possible the fact that the peony is something without which you should not attempt to make a garden.

In the first place the peony is very easily grown; second, when well established it is a permanent feature of the garden; third, the peony is perfectly hardy wherever apples can be grown; fourth, the blooms are extremely large, showy and in a variety of colors, from white through pinks and reds to purple; fifth, most varieties are fragrant; sixth, the plant has practically no enemies, so that neither spraying nor hand-picking of insects is necessary; seventh, as a cut flower the peony is as valuable as it is for landscape effects in the garden. Surely this is a formidable array of advantages to be placed over against two very small disadvantages: the peony multiplies rather slowly; and, second, many varieties produce such large blooms that the slender stems are not strong enough to stand erect and the bloom is beaten down to the ground and ruined by rains.

The latter fault of the peony may be overcome or avoided in two ways: first, by the selection of varieties that are notably strong in stem; second, by some mechanical device or support such as a wire hoop on three legs, similar to the supports that are sold for tomato plants.



Some peonies hold their stems stiffly erect even under the weight of a large bloom, as in this French propagating field



Other varieties are weak-stemmed and need mechanical support to keep the blooms from being beaten down into the mud



For some reason the single varieties of peonies have been less widely grown, but no collection is complete without them

As to soil, the peony is not at all particular in its choice. It may be safely said that a garden that will grow vegetables will produce satisfactory peony blooms. The plant prefers a medium heavy soil that is neither distinctly clayey nor sandy. The peony is very much like the rose in this respect, having a fondness for a fairly heavy, rich soil.

Because of the slowness of propagation, gardeners will always procure their peonies as mature plants of one year, two years' or three years' growth. After the blooming period in May, June and July, the peony presents a luxuriant growth of foliage until late in the summer; this then begins to dry and finally entirely disappears with the early frosts. This habit of growth indicates that the plant is in a dormant state in fall and winter, so that the time to plant is from the middle of September until the first of November.

The plants are secured from a nurseryman who may be depended upon to supply varieties that are really true to name, in the form of dormant roots, such as the one illustrated herewith. These roots will show at that time a number of pinkish eyes, from which the next year's growth starts very early in the Spring.

While peonies have successfully been transplanted in the spring, it is, to say the least, an extremely difficult task and one that is usually sure to cause the loss of some of these delicate succulent shoots, which are at that time of the year pushing up through the ground.

In planting the roots in the fall they should be set in carefully prepared soil which has been dug deeply and well enriched with very old pulverized manure. Here again the peony is very much like the rose in its dislike of having manure directly in contact with its roots. For this reason the manure must be thoroughly incorporated with the soil by continued forking before the roots are set. The roots are then placed so that the upper eyes are not less than three inches below the surface of the soil, and they should be set from two to three and one-half feet apart, whether in rows or groups. After planting it is a good thing to cover the ground with a good heavy mulch of manure as an added protection to the roots—although probably not a needed one for that reason—and to serve as a further enrichment of the soil.

In the spring it would be well either to remove this mulch very early or else to allow it to remain until after all of the shoots have come up through it. Do not attempt to remove it from about the shoots themselves for this is sure to result in damage.

The first care the peony may receive in the spring is not a necessary one. After the dark red shoots have appeared and have unfolded the leaves and branches, there will appear several buds at the end of each stem, in some cases five or six. It is impossible for the peony to bring all of these to maturity, so that to make the most use of the available energy it is a common practice to pinch off all but the largest bud, which will probably be the

central one. When the buds are attaining a very large size, just before unfolding, it may be noticed that ants are running up and down the stems and over the buds and leaves. There is nothing to be feared from this invasion, as the ants do absolutely no harm at all. They are merely seeking the sweet, gummy substance that exudes from under the edges of the bud's unfolding petals.

The peony may be depended upon to produce luxuriant blooms of very large size without further attention. If you are like most garden amateurs, however, you will not be satisfied with this, but will want to find some way to produce extraordinary blooms. An application or two of liquid manure, after the buds have begun to swell, will contribute to the size of the flowers. The peony is a gross feeder and cannot easily be overfed.

In the case of certain varieties, the beginner may be puzzled and discouraged to find that the buds formed the first year after planting will fail to develop, but will turn black and finally fall off. Unless this happens again the second year there is no cause for alarm. It simply indicates that the peony has not become sufficiently well established in its site to nourish properly the buds that have been formed. In case this blasting of buds occurs the second year, it would be well to investigate the matter of soil or situation. The soil is probably unfitted by reason of its clayiness or lightness, or perhaps the plant does not receive sufficient sun, which the peony must have.

In cutting the blooms it is well to pick them off in the early morning just as the bud is starting to unfold, plunging the stems at once into water and thus preventing air from entering the stem. The flowers will then last for several days or perhaps a week in water indoors.

Assuming that you are convinced that your garden should not be without peonies next year, the very important question arises: what varieties should be selected from the almost innumerable ones catalogued by the nurserymen? It may be well here



A light pink bloom of the "bomb" shape type, where the doubling is very pronounced and the form large and globular

to draw attention to a most important principle that should govern the selection of varieties of any flower. It is this: a variety appears in the horticultural world always as a novelty. It is offered in glowing terms usually in one or two catalogues, necessarily at a high price. It may turn out to be a great improvement on all earlier varieties, or it may turn out to be practically worthless within a year or two. In any event a variety that has proven itself fit to survive will in time be offered in many of the nurserymen's catalogues. In this way it may be recognized as a standard tried-and-true sort. For instance, Festiva Maxima is probably considered by the majority of peony growers, whether amateur or professional, as the finest white to-day. It was introduced by Mielez in 1851 and has held its own against all aspirants since that time.

I have asked a number of men who really know peonies and make a business of growing them, to name the ten most satisfactory varieties for the amateur gardener. These lists follow. In the same way that Festiva Maxima recurs continually through these lists, you will find several others that have received almost as marked recognition. Couronne d'Or appears often—white with yellowish reflex petals and carmine edges. Duchesse de Nemours is another standard favorite, a sulphur-white with greenish reflex. Others that appear in several of the lists on the next page are: Modeste Guerin, a bright rose pink with purplish cast in center; Marie Lemoine, a large sulphur-white, shaded with pink and chamois—very late bloomer; Felix Crousse, a brilliant red, late mid-season; Eugene Verdier, a flesh-pink, cup-shaped flower, shaded with yellow and salmon; Delicatissima (also known as Floral Treasure), a clear, delicate pink, lighter at center; and Mons. Jules Elie (see illustration), a glossy flesh-pink, shading



Monsieur Jules Elie, another excellent example of the cup shape with broad guard petals, like Marechal MacMahon



In the "bomb" shape the flower is so fully doubled that the outer petals are forced back close against the stem



La Tulipe, a white resembling Festiva Maxima in the carmine stripes of petals, and particularly beautiful when fully open

to a deeper rose at base. I can give no better advice to those who are going to plant peonies this fall than this: Pin your faith to these thoroughly established varieties—they cannot possibly fail, and the results will naturally lead you into the enjoyment of trying out the year's novelties next season.

Beaute Francaise	Prince Imperial
Couronne d'Or	Virginie
Duchesse de Nemours	Mme. Lebon
Festiva Maxima	Mme. Ducel
Lee's Grandiflora	Mme. Coste
Rubra	

WM. WARNER HARPER,
Andorra Nurseries.

Achille	Edouard Andre
Candidissima	Festiva Maxima
Couronne d'Or	Jeanne d'Arc
Delachei	Meissonier
Duchesse de Nemours	Modeste Guerin

ARTHUR T. BODDINGTON.

Festiva Maxima	Felix Crousse
Mons. Jules Elie	Marie Lemoine
Duchesse de Nemours	Livingstone
Modeste Guerin	Edulis Superba
Delicatissima	Delachei

COTTAGE GARDENS COMPANY.

Festiva Maxima	Felix Crousse
Delicatissima	Marie Lemoine

Modeste Guerin	Madame Crousse
Jeanne d'Arc	Madame Geissler
Mons. Jules Elie	Mme. de Verneville

ELLWANGER & BARRY.

Festiva Maxima	Marie Lemoine
Alba Sulphurea	Felix Crousse
Delicatissima	Modeste Guerin
Jeanne d'Arc	Tri d'Ex. de Libbe
Livingstone	Prince de Talindyke

S. G. HARRIS.

Eugene Verdier	Madame Geissler
Alice de Julvecourt	Modeste Guerin
Felix Crousse	Marie Lemoine
Festiva Maxima	Glorie de Chas.
Edulis Superba	Gombault
Madame Ducel	

WM. W. KLINE.

Festiva Maxima	Richardson's Grandiflora
Couronne d'Or	Officialis Rubra
Dorchester	Fl. Pl.
Madame Chaumy	Grandiflora superba
General Grant	Victoria tricolor
Pamponia	

W. S. CHANDLER,
Thos. Meehan & Sons.

Edulis Superba	La Tulipe
Festiva Maxima	Marchal Mahon
Mad. Ducel	
Modeste Guerin	Jeanne d'Arc
Madame Calot	Couronne d'Or
Marie Jacquin	

GEORGE H. PETERSON,
Fair Lawn, N. J.

Festiva Maxima	Claire Dubois
Mme. Crousse	Richardson's Grandiflora
Avalanche	M. Krelage
Couronne d'Or	Felix Crousse
M. Jules Elie	
Eugenie Verdier	

WILLIAM A. PETERSON,
Chicago, Ill.

Festiva Maxima	Felix Crousse
Marie Lemoine	Delachei
Mons. Jules Elie	Delicatissima
Richardson Rubra	Giganthea
Superba	Lime
Livingston	

W. H. WETHERBY,
Livingston Seed Co.

Mme. de Verneville	Georgiana Shaylor
James Kelway	Le Cygne
Lady Alexandra	Le France
Duff	La Lorraine
Theresa	Mont Blanc (Lemoine)
Rosa Bonheur	E. J. SHAYLOR.

Mr. Shaylor adds that if the amateur cannot afford these varieties, here is another list of lower cost:

Festiva Maxima	Mons. Martin Cahuzac
Aurore	
Baroness Schroeder	
Eugenie Verdier	Mme. Jules Dessert
Soulangue	Venus
Mme. de Galhan	Milton Hill

New Ways of Controlling Electricity in the Home

WHAT RECENT IMPROVEMENTS CAN DO, NOT ONLY TO HELP BY LABOR-
SAVING DEVICES, BUT TO ECONOMIZE IN THE AMOUNT OF CURRENT USED

BY KATHARINE NEWBOLD BIRDSALL

THE new house that is not wired for electricity bears the same relation to up-to-date home convenience that the old-fashioned cistern with pump does to the modern method of plumbing.

That electricity is a necessity and a convenience nowadays more than a luxury we find proven on every side; the depths of its luxuriousness have so far been only faintly sounded although we hear now that milady has her desk supplied with an electrically heated monogram stamp, which, pressed upon the sealing wafer imprints her crest upon the seal without the trouble of lighting a candle, and with no smoke to blacken the die or the sealing wax!

Everyone who uses electricity realizes well the joy of a matchless light; to take the time to find and to scratch the match for a gas illumination, seems a relic of the dark ages to one who is familiar with electricity. Even the possession of an electric spark-lighter for igniting gas does not remove the inconvenience of gaslights, although it perhaps minimizes the danger from setting fire to other objects with the flying match-head or the burning match. But, granted the possession of such an electric lighter, would it be any more of a stationery fixture than a box of matches—

and would there not be the same groping as for that elusive match-box?

The greatest objection, if one can call it such, to electric lights in the home, has been that of the consumption of power, with only one degree of light; the light was either turned on in its full power, or the room was in darkness. Now, however, the invention of several economical devices which may be attached in a minute to all fixtures, enables us to have a dim light or a medium light, like that of turned-down gas, as well as the full blaze. The devices work either with a chain or a cord, or merely in the turning of the bulb by hand. The turning down can also be effected at a distance, which is convenient for those of us who have the bad habit of reading in bed.

One economical house owner has had a switch put in his dining-room which controls the four center lights, so that one or four lights may be turned on or extinguished. When the maid sets the table, the button is given one turn, which lights one bulb, giving sufficient light for her work. When time to serve the meal, a second stop on the switch lights the



The arduous task of cleaning and polishing silverware is made a matter of a few minutes' work with electric help

cluster, making the room brilliant. A third stop in the switch turns out the brilliant lights, leaving only the one to enable the maid to "clear off." The last light is the same as the first, dim, but sufficient for working purposes.

In some small houses the buzzer which summons the maid from the kitchen to the dining-room is distinctly heard when there is a lull in the conversation. This annoyance may be prevented by having a tiny red light instead of a buzzer, placed in so conspicuous a place that the maid will constantly keep her eye upon it.

Electric table lamps are now provided with a dimming switch which increases or diminishes the illumination, giving varied quality of light and making for economy. This device effects an economy in the light consumption of from 30 to 80 per cent.

No one objects to economy which affects either a gas or an electric lighting company, nor does the company object. The more convenience they can supply to their customers, the more the customers' pleasure; also the more investment in the delightful devices which save trouble and use greater quantities of power!

A reading lamp should be most carefully selected; a scientific lamp is of nearly as much value as scientific eye-glasses. No direct rays from electric light should be allowed to meet the naked eye. The reading light should be diffused by proper scientific globes, which will also control the light rays, so that the greatest efficiency may be secured without loss of artistic effect, and with no shadows.

All that is necessary for the installation of proper reading lamps is a small switch connection with the main feed wire which may be made from either ceiling or floor.

Where a bedroom is provided with center lights, or with wall brackets which do not suit the positions of the furniture, it is advisable to have removable brackets fastened to either side of the dresser or bureau with thumb screws, connected with a candelabrum switch and wires to the nearest baseboard receptacle. These candelabra will throw a splendid light on the glass and upon the person before it. It is also a great convenience to have a portable electric candle installed on the writing desk.

A little ingenuity exercised when wiring a house will result in the introduction of single useful lights in various places that have heretofore been neglected. Why should the garret be dark? Why should the cellar be comparatively dark? Why should you carry a candle to your closet or storeroom? There may be a connection in every dark closet, which will turn on the light when the door is opened. This is accomplished by the switch being set in the back of the door hinge; as the door opens wide the hinge presses the



Ironing holds no terrors when it may be done outdoors with an electric iron

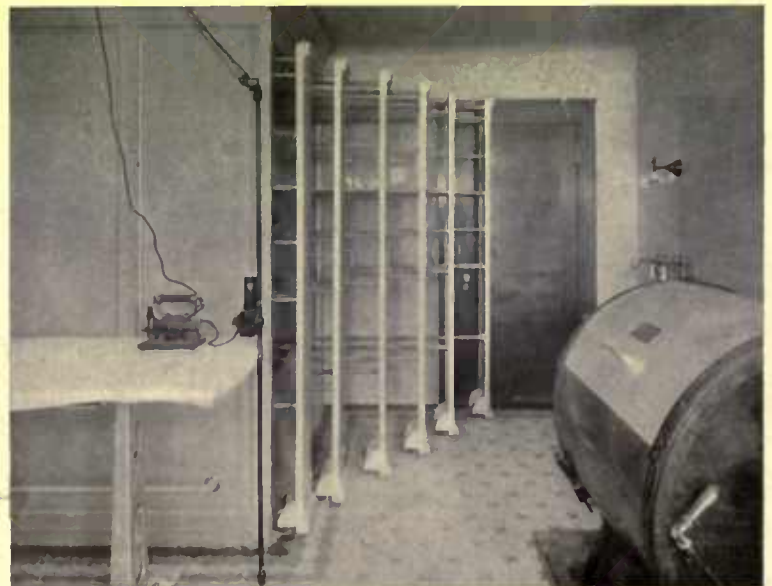
button, keeping the light full till it is closed or partially closed. A switch of this sort in the door of an unlighted garret, as well as in closets, would be a boon. The installation is simple and any good electrician can do the work. A tiny light inside the medicine closet and on the old-fashioned wardrobe, would also be a great help.

Who has not had trouble with finding provisions in the icebox, because of the dimness of the light? A small electric light so arranged that it will light the whole box, can be connected with the door, as above described.

Two lights in the bathroom, one on each side of the mirror, are possible with only one outlet, concealed by one of the fixtures. The extra light is provided by a wire run under the mirror to its opposite side.

Reminder lights are valuable in certain parts of the house. Take, for instance, the cellar. Most cellar illumination is controlled from the kitchen; but the light consumption is in the control of the person who forgets or remembers to turn out the cellar light. Coming upstairs in a hurry, the cellar door is closed, and a flood of light is perhaps left below to burn all night. To guard against this waste, a small red light is set in the kitchen in series with the

(Continued on page 184)



The extent to which the use of electrically operated devices are used in the home is shown by the motor-driven wringer, electric washing machine and drying room

Three Experiences with Lily Pools

HOW THE "LILY-POLLOO LADY" REDUPLICATED IN THE GARDEN SOME OF HER CHILDHOOD'S FAVORITE HAUNTS

BY DOROTHY AND LOIS WILLOUGHBY

Photographs by the Authors

A LILY pool is the very center and life of a garden. A garden without a pool is like a living room without a fireplace.

It is so deliciously cool on a hot day to sit down and see the reflection of the sky and of the surrounding flowers in a pool of green water. The fishes dart gaily about, taking mosquito eggs here, gulping a bug there, and jumping for their food whenever the spirit moves them. Then at last they settle down under a big white water lily for a long, drowsy nap.

The different colored lily leaves as they open up in the water, so placid and restful, hold your attention, and nothing is more beautiful than the *Nymphaeas* as they slowly unfold and as slowly fall to sleep again.

Many people think it quite impossible to become interested in gold fish, but these pool dwellers are not monotonous as they imagine. Gold fish can be taught to feed from one's hand, and if fed regularly, soon recognize the approach of the one who feeds them. Then, too, it is exciting sport to see them fight for a bug that comes within striking distance, so you see there is much that is interesting besides their brilliant colors.

A friend of the writer's, whose childhood was spent in the country, has never forgotten the delights she experienced at meandering about in a big swamp. Here the rains formed numerous pools, around which clustered the blue flag and cat tails, towering far above her head. Here, too, was a colony of famous frogs. It was a most wonderful playground.

After her marriage she went far away, where swamps and cat tails were almost unknown. But her heart yearned for the pool and she went to work to make one. The result was most gratifying and she soon had duplicated some of her favorite haunts in the old swamp. The way she did it may prove interesting, and these are her instructions:

LOIS WILLOUGHBY
by the Authors

Dig a hole—if it happens to be in clay soil, so much the better—starting with a depth of one foot and gradually sloping to three feet in the center. If the pool is four or five feet long, it should be two and one-half feet deep in the center. For a larger pool three feet is better. Wherever the lay of the land permits, it is

e lay of the land permits, it is well to let it follow its natural lines. However, the pool can be made any shape one wishes, round, oblong or of geometrical design.

If there is a beautiful tree in the vicinity, dig the lily pool near to catch the reflection in the water. The tree also serves as a windbreak. Dogwood and hardy shrubs can be added, but remember that the lilies must have full sun for at least half of the day.

After the pool is dug it should be thoroughly tamped down, stamping it hard with the feet and then with a pole or stump, so as to make a firm bottom that will hold water. For a natural pool this is all that is necessary. In ordinary weather the rains will keep it well filled and the soil will drain it.

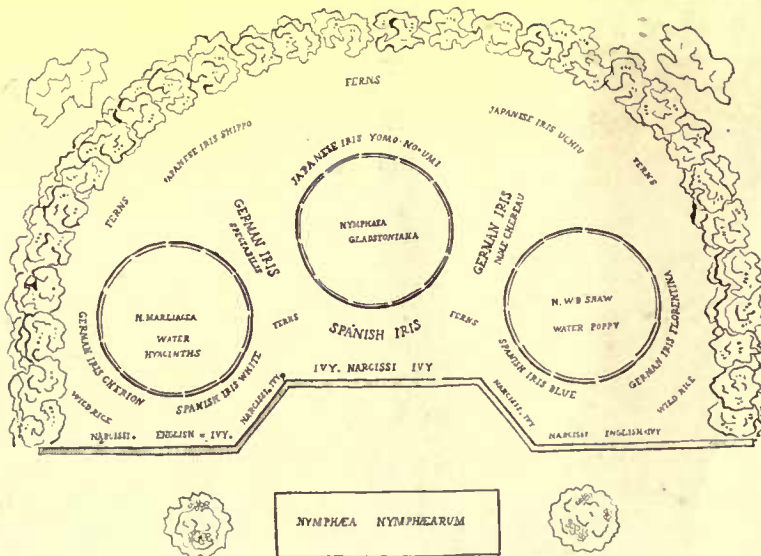
Plant the lilies in a tub. Put four inches of well rotted cow manure, well pressed down, in the bottom of the tub, and cover with six inches of soil. The soil from a swampy place is ideal for water lilies and should be used if possible. If not, use a good rich soil mixed with rotted cow manure. Place an inch of sand and gravel on top. This will prevent the dirt from washing away from the lily roots and keep the water clear.

For a water garden of this kind the hardy varieties of *Nymphaea* (water lily) have been tested and found the best. They are the least expensive, costing from 50 cents to \$1 a plant, and one is sure of their blooming the first year.

Gladstoniana is a robust white lily with flowers from 6 to 8 inches in diameter. *Marliacea* is another vigorous



The first pool was inspired by some of the corners in the old swamp where the bullfrogs lived among the water lilies



The second experiment was along more formal lines than the first and was planted with numerous moisture-loving plants

variety, which comes in white and a beautiful soft flesh pink. The W. B. Shaw, a superb early blooming pink water lily, has leaves 8 to 15 inches across, and flowers 8 to 10 inches in diameter.

There should always be some night blooming lilies. These open soon after sunset and do not close until nearly noon the following day. The *Dentata*, one of the best night lilies, has flowers measuring from 8 to 12 inches in diameter. Plant with this the blue *Zanzibariensis* lily. All of these varieties re-open from three to five successive days.

Around the edge of the pool plant freely iris of all kinds—Japanese, German and Spanish; common blue flag, marshmallow, meadow beauty and all kinds of narcissi. And don't forget the pickerel weed. This native plant with its pale blue flowers is very beautiful under cultivation. Like the water hyacinth, however, it needs restraint to keep it from becoming too luxuriant.

With these preparations completed, put in the fish and plant seaweed for them to nibble. This can be bought at any place where fish are sold.



In the city garden a concrete basin formed her pool and it was graced with little box trees in decorative pots suggestive of Italian gardens

Another attractive flower for the pool is the water hyacinth. However, be careful to start with only one plant or at the end of the season the pool will be crowded full of hyacinths. This plant can be kept intact by building a little wooden floating frame around the bulb which will not be noticed in the water.

When the flowers are planted, push the tub down until it is securely settled in the bottom of the pool, and fill in the water with a hose. Every day put in a bucket of water for evaporation. This will gradually change the water and keep it from getting stagnant. To change the pool entirely, simply let the water run and flush the pool. You can have a drain by making a gutter and always keeping the water at a lower level until you want to flush the pool. But as the fish eat the mosquito young and keep the water clean, this need not be done until the end of the season when the pool is drained and cleaned for the winter.

When it comes time to put the hardy *Nymphaea* into winter quarters, drain the pool of all the water. Then put leaves 2 or 3 feet deep around the roots, entirely covering the bottom of the pool. On top of this lay a few branches or sticks to keep the leaves from blowing away.

The tender *Nymphaea*, the *Zanzibariensis* and all night blooming lilies, must be dug up, leaving as much soil around the roots as possible. These should be placed in a flower pot which will hold enough water to keep them moist. The water can be cold, but must not freeze.

Greatly inspired by the success of her effort, the woman built herself another pool. This garden was made of three half hogsheds sunk until the open heads of them were flush with the ground. The soil was prepared the same as for the first water
(Continued on page 185)

山
の
内山
の
内

The venerable John Burroughs, a frequent visitor at Yama-no-uchi, has hit the spirit of the place in his remark: "I come here to find myself; it is so easy to get lost in the world."

"Yama-no-Uchi"

"THE HOME IN THE MOUNTAINS," WHERE MR. FRANK SEAMAN FINDS OPPORTUNITY FOR A NEVER-ENDING ACTIVITY IN BUILDING AFTER THE JAPANESE METHODS, BREEDING CHICKENS AND HATCHING TROUT

BY ROBERT ALLISTER

Photographs by Helena D. Van Eaton



"Wu"

NO finer compliment was ever offered to a human habitation or to any spot in this broad country, than that voiced by John Burroughs as he sat in this log cabin in the midst of these old American hills.

"I come here to find myself; it is so easy to get lost in the world."

And so they engraved the words in copper and set the tablet into the gray stones of the chimney.

One day a visitor, pausing in his journey into the further Catskills, looked over the stones and timbers and remarked: "I live in an old house myself. It was built in 1730." Not an awkward tribute to a cabin scarcely three years old!

The cabin crouches like a big black hen on the brink of the valley. There is a splendid swirl of country all about it. The rise beyond is gentle. The dip below is sharp, shadowy, sunlit, all patches of light and shade, rise and fall, rock and fern-dell, softness and sharpness, the big range of hills on the other side of the valley looking strangely remote in shimmering weather, stalwart and imposing when picked out with snow.

Down in the immediate hollow are the trout ponds, five of them, one emptying into the other and spilling over at last into the stream that turns a picturesque wheel, ducks under an arching Japanese bridge and ends, you never find out just where, among stepping stones, orchid-spotted dim places and rocky vistas of

sunlighted currents. Midway is the tea house, that might have been lifted out of Nippon—making you think that the Indian Napanoch of the village *might* have been Nipponoch—the Japanese stables that remind you of the way the Tokio castle lifts itself beyond the bridged moat; the hatchery by the middle lake and the trout man's cottage a pole-length away. The sound from below is the mutter of a waterfall, a busy tumble of water that in winter builds fantastic castles of ice.

If you come up directly from the ponds you mount by irregular stones that seem to have happened, but which tell of that subtle Japanese ground art in which not a chip of stones goes unnumbered.

Think of it as just the opposite of the Italian notion in which garden beauty is art cut out with a knife. Your Japanese thinks that in landscape nature's way is a good way and must not be spoiled. Nature's way is imitated in his art, and if you guess the device too quickly it is bad art. So that here in this American version every little splash of moss, or turn of path, or glimmer of wood flower must seem to have been discovered and not invented. In the large it is nature arranged, and the nature of this region, rather than nature bedecked or disfigured.

It is here in this garden spot, that we shall ultimately see a true Japanese house—a house of which the stables, the water-wheel, the bridges, and the fairy tea house are prophetic—a true Japanese house in the vestibule of which, if you please, you shall remove your shoes before entering the prim, paper-screened rooms with all of their straight beauty, all of their intellectual nicety and

classical simplicity of line, and always eloquent harmony of color.

There are two gates. One, the Japanese gate, true to the Japanese way, and a very awesome affair if you meet it in a dim light, leading through a leaf-hung labyrinth which in the fair season is flecked with spots of lantern light. At the upper gate you meet the sign of the Black Hen (which explains the hut simile) and drive past the brooder houses and hen mysteries of the upper farm, to the cabin itself.

The log cabin is not Japanese. Frederick Remington decided that it was "Just plain North American," and the description fits all that you will find on this busy and blossoming level. Yes, we have come up out of the little Japanese paradise for the moment to a region of native lines and native ideas. I shall tell you in a moment some things that will suggest how the Japanese theory of things, like an aroma from the out-spreading garden below, has been able to invade and, to my thinking, transfigure for the time, certain nooks of this sternly North American abode. Just now, let me supplement the picture which you will have already looked at, by saying that the cabin seems to grow out of the soil. The boulders of the chimney begin in a heap, rising casually in the earth as if debating whether they *would* be a chimney. Once they make up their minds, the chimney gets down to business and becomes the real thing in chimneys. There is another one beyond, heaped in the heart of the house—the one with the Burroughs tablet.

Bigger boulders fringe the brow of the hill and mark the edge of the terrace. Your path from the carriage-way twists over broad slabs that again seem like a happy accident in nature's architecture, until you find yourself under the wide overhang of the roof. You tether your hat on a peg. If you have any sentiment you will not hang it on Dr. Hornaday's peg, or Frederick Remington's or Ernest Thompson Seton's or James T. Powers'—they are all labelled just as yours will be labelled, a wide row of them. Artists, writers, publishers, travellers, captains of industry—there is a long list of foreign and native notables, and a sprinkling of plain folks.

Then the stained chestnut half-door, studded with metal, swings to your welcome and you step into the full shelter of that long, low roof. Oliver Wendell Holmes once remarked that "the hat is the vulnerable point of the artificial integument." The roof is the hat of a house. And it is the vulnerable point. To produce the right ensemble in a house, first catch your roof. Let us not be bigoted.

There are many sorts of proper roof. But the line of this one, following the slow slant of the big hills, not effronting the storm, wide in its shadows for the torrid days, snuggling close to the shrub-and-tree-dotted plateau, surely has a consistent and enduring charm.

The logs of the cabin end unevenly at the notched ends. I can fancy the first dismay of the native builders when the designer insisted on the rough realism of these uneven ends. There are other things here that must have puzzled these native builders, who certainly build better than they knew. The inset wood designs in these straight, heavy, unpanelled doors, for one thing, must have seemed more than a trifle eccentric to the country carpenter—and he *had* to be the country carpenter, for it was part of the plan of the designer (who sat near the workmen, her drawings in her lap, and forgetting them frequently, I fancy, in impromptu creation) that every stone, stick and hand should represent the region in which the house was made to grow.

But you are looking at the broad living-room fireplace with its big crane, transplanted from some venerable hearth, and its cavern vast enough to give elbow room to the husky oak from the wood-box rising head-high on the right hand. Along the edge of the shelf under the Burroughs tablet, runs a whimsical line from the "Book of Tea"—and if you have not read the "Book of Tea" you have missed one of those enchanting book-excursions which only happen to the most vagrant of us once in a long while. When you come close enough to the mantel, you read: "Let us linger here in the beautiful foolishness of things."

If you miss the philosophy of that line, I'm afraid that you will miss the philosophy of the cabin, you will miss a feeling of something fine, quaintly done, in everything about you.

And yet the oddest things about this living-room have a reasonableness when you become conscious of them, that might well illustrate some of the deeper meanings of that debated word Art. The wide-silled windows looking out upon the valley are as logical as a log, if it comes to that. The curtains of unbleached linen seem as inevitable as the golden brown of the ammonia-fumed natural wood—a superb hue, by the way, a background fit to set off a Japanese lily or any splash of color that chances near. The bookshelves—yes, there are many books, and books again; books that range the world, that ransack the arts and sciences, that ransack life. There are big chairs in which to read them, chairs that gather you up while you "linger here" and "find yourself." Barbaric blankets the Navajoes made, some of them from



The Japanese gate, an awesome affair in a dim light, leads into a wonderfully beautiful drive up the hill, now past a mass of rhododendrons, now following the brook



The log cabin is "just plain North American" and seems to grow right out of the soil



The trout pools spill over into the stream that turns a picturesque wheel



The late Frederick Remington and Homer Davenport on the terrace



The kettle hangs from an ancient crane beneath the motto from the Book of Tea

spaces on the dull Indian red of the floor. Your eye may chance to discover other artistry of the red men (and red women) in two or three mellow-hued baskets near the rafters. A very giant of a moose's head, crowned by a superb pair of antlers, once laid low by the host's rifle, looms against the timbers of the far wall, and peers in the twilight as once you might have seen it in the far northern woods.

Add a few rifles and trout rods to the walls, a few souvenirs of travel, and you begin to have something of the simple surroundings. An electric wire creeps covertly into this North American haunt. It performs an artistic service, for at the rising hour it sets Paderewski to playing a soft bit of Shubert on the piano which stands cheek-by-jowl with the chimney.

For the moment, we seem far from Japan, but it is just at this juncture that the poetic Nipponesque philosophy reappears. In the Mikado's country, you will remember, the greeting of the guest is a delicate, an extremely subtle art, perhaps we ought to say religion. Not only is the single spray of flowers in the bare, the exquisitely bare, Japanese room, a mystical homage to you and the season, to the thing your coming stands for, something not to be said by any other flowers at that moment, but the single vase shining on the raised piece of floor at the alcove is a symbol chosen from out the treasure in the "go-down" outside the house, to say something in silent art language to you and for you on that particular occasion. If you came again, you would see another single symbol, just as you would see another flower, that would touch the dominant note of that hour. I cannot pretend to expound, because I cannot pretend to understand, the full beauty of this symbolism. I mention it simply by way of suggesting how the hostess, who has sat at the feet of Japanese nobles, and who knows as few who are not Japanese are permitted to know, the deep meaning of these things, has applied the idea in this

the famous Harvey collection, cover the couches and mark out

North American log cabin.

For example, of a morning

you will notice that the three or four objects of pewter on the mantel are not the copper or old Chelsea that you saw there the night before. To-morrow morning, you will catch the different hues of Wedgwood or pink lustre, and the next morning a Colonial setting will start your suspicion of a vast "go-down" or some ample China Room, a suspicion that will be confirmed by the happenings of the table itself. At each meal the dishes change, day after day, like the clouds or the shadows in the valley, and with them, always in an amiable harmony, the hand-woven runners or Colonial covers. Napkins follow suit. In the design of some of the Newcomb pottery as well as in the linen itself, appears the Japanese characters for "Yama-no-uchi."

"Yama-no-uchi," the name of this picturesque estate, is something of a mouthful if you take it suddenly. It was a bit puzzling at the last Madison Square Garden Poultry Show where the "Yama" Black Minorca hen took first prize—but that is another story. Marquis Ito gave the place its name, and the Marquis gave the translation with it as "The Home in the Mountains," so there you are. The hieroglyphs are good to look at. You are glad to meet them again and again in unexpected ways and places.

At the table, they add a little of the exotic to an effect that is usually not exotic at all. For here hundreds of Colonial pieces come and go—I ought boldly to have asked to see the China Room. I should like to know what the Japanese butler thinks of these Washington plates; and for that matter, what the Japanese maid thinks of those old American coverlets and patriotic pieced quilts which deck the Revolutionary mahogany in the sleeping rooms, and which displace one another in some daylight hour when you are not looking. If you are a collector, I can fancy your feelings. The oriental mind has a different perspective and might well be perplexed by this log cabin glimpse of the West touched by the pene-



Big boulders fringe the brow of the hill and mark the edge of the terrace

trating symbolism of the far East.

The sleeping rooms, by the way, have a manner of seeming to be rustically primitive while meeting you at the essential points with the proffer of a modern luxury which most of us are weak enough to welcome even in a log cabin. There is no litter of things, no restless clutter here or elsewhere, to produce the effect bluntly described by the artists as "noisy." The peaceful brown of the logs that make the main walls is punctuated by a fragment of illuminated text that is a low-voiced greeting to you. It is a little matter, but when on another visit the low voice sounds the different note of another day, you have a deepened sense of Kipling's "magic of the necessary word."

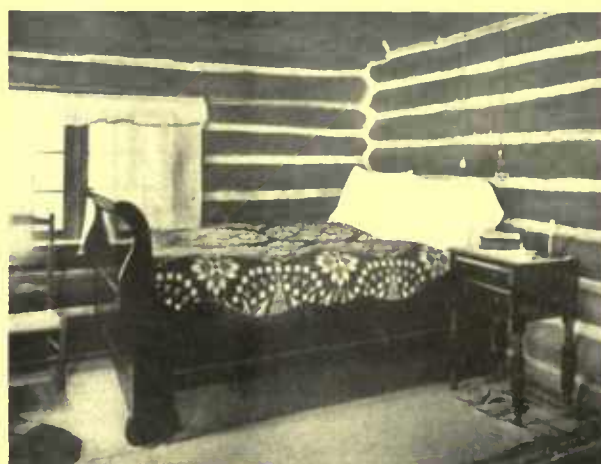
From the windows of this side opposite the valley, you look out on a thousand apple trees, a thousand currant bushes, two thousand raspberry bushes and a kitchen garden spread with the varying greens of everything that will grow in this climate. The upland is otherwise alive. Wu, the reticent Japanese dog, has learned to take peacocks, partridges, squab and guinea hens as much for granted as blue Andalusians or Rhode Island reds. Wu, indeed, produces the effect of being past astonishment. Also, like every other living thing here, he is well fed and content.

In the clothes-presses of this cabin are peculiar treasures that play a part in the charm of life as the hostess guides it—captivating kimonos, sashes, sandals and fans of the unvarying Nippon fashion, as well as a score of Yankee gowns dating from the days when we were imitating the Empire and St. James.

Of an evening after one of those brief mountain twilights, these silken things are likely to come forth to transform the company, and a strangely fascinating scene they make of it. Shades



The stained chestnut half-door, studded with metal, welcomes you into the shelter of the long, low roof



The sleeping-rooms have a manner of seeming primitive while meeting you with the proffer of luxury

of Dan'l Doone and Davy Crockett! What a fantasy in the light of the roaring hearth!

I remember one night when the host and hostess and men and women guests all were called to appear in true Japanese garb, and were supplied with the wherewithal to obey the command. I remember Rin, the little Tokio maid, down before the charcoal burner fussing deftly with the tori-nabe, her ceremonial procession through the kneeling group, the awkward efforts of the inexpert in disposing of their heels, the solemn efforts to respond properly to the deep salutation of the maid, herself as graceful as a geisha, and the butler, wearing a wonderful blue, standing at the back, only his emotionless face caught by the firelight. I remember Rin's epic song, weird and strident, full of a strange dramatic passion, the guttural twang of the samisen, the odd thrill of those Eastern dissonances, and the hush that fell upon us to the close of the recital.

At the end, we took our candles and filed away, leaving only Wu, blinking on a Navajo blanket. And the cabin, like a great black hen on the brink of the wide darkness, closed its eyes until the dawn.

A whimsical poet who has felt the spell of Yama-no-uchi ends his screed with these stanzas, which may serve the same purpose for me:

"And so, thou Yama fair, I guess,
We'll count thy beauty wise,
And all thy rare No-Uchi-ness
Religion to the eyes.
For Beauty finds its proof in Peace,
And here the sign is sent.
May fortune grant thee lasting lease,
Thou Cabin of Content."



The office, chicken houses and trout hatchery are built as they would build in our climate and with our materials



The tea house that might have been lifted out of Nippon is exact in its fidelity to the Japanese type

The Prophet's Chamber

A NOVEL IDEA FOR FURNISHING THE SPARE ROOM—A SIMPLE BUT DISTINCTIVE ROOM THAT WELCOMES THE PASSING GUEST

BY LYDIA LEBARON WALKER

Photographs by the Author

THE accommodations of a house are not necessarily in proportion to its size; and there is a kind of economy which consists not so much in curtailing as in expanding the facilities one possesses. These reflections were suggested by a very simple room in a New England home, which the clever little hostess picturesquely termed "The Prophet's Chamber." The idea embodied in that characteristic bedroom is at once so pretty and so practical that it may prove interesting to many other housewives, wherever they may be.

Before entering into any details of the nature and furnishings of this interesting chamber it will be appropriate to lead up by referring to the genesis of the idea in its modern application. From these words the reader will probably jump at the conclusion that the thought is not new, and this inference will be both right and wrong. That is to say, the accommodation is so old as to be new. It is too old even to be a revival. It is simply a hint taken after the lapse of ages from what was hardly more than a casual suggestion made by a hospitable woman of Old Testament times when she was anticipating that a certain prophet would pass that way. To refresh our memories we may recall that the good woman said to her husband: "Let us make a little chamber, I pray thee, on the wall; and let us set for him there a bed, and a table, and a stool, and a candlestick; and it shall be, when he cometh to us, that he shall turn in thither." Without feeling competent to indulge in any learned commentary on the curious words "on the wall" as they occur in the text, we may satisfy ourselves with observing that this prophet's chamber was, at least, in some out-of-the-way place. It was not one of the familiar and accustomed rooms, utilized in the ordinary round of domestic life. It was an odd room, a sort of extra that was always to be ready for the passing guest. And this pretty piece of thoughtfulness is wafted to us after all these centuries like the odor of flowers that have long since faded.

The central thought of such a room now would not be essentially different from that which inspired the old room referred to in the book of Kings. It is for the passer by, the chance guest, the visitor for a night, who needs hardly more than a restful chamber into which he may retire and feel at home before he starts again upon his way. The chamber is not one where a visitor would be installed who was going to remain for any great length of

time. The accommodations would be too limited, and possibly the location of the room not sufficiently convenient for anything like permanent occupancy. The furnishings too, are of the simplest character, hardly differing from those enumerated in the quaint

and ancient description. A bed, a table, a stool, a candlestick, such were the simple items. There was enough to meet the requirements of necessity, and the very simplicity of the place would not be lacking in certain elements of taste; but there was nothing superfluous, nothing for display or empty show. It was a temporary abode rather for wisdom than for fashion, though one might imagine its occupant sleeping peacefully within its quiet enclosure. Its very atmosphere seems to breathe peace.

The conditions of life probably do not vary so much as we are apt to fancy in the different epochs of time. The women who lived 900 B. C. had problems similar to those confronted in this year of grace; and we are solving them well or ill as they solved them well or ill. Every housekeeper now has her occasions in the round of the year when informal hospitality is to be extended to some good friend of the house. It cannot matter that the so-called spare room is occupied, there must be some cozy corner that will show a welcome even if it show little else. And probably in almost every house there is some out-of-the-way room which a resourceful woman can adapt to the purposes here outlined. It may be off in the third story, former abode of trunks and boxes. If these can be disposed of elsewhere, the room may be converted into a Prophet's Chamber. Or it may be some hall room so small that one hesitates to put into it anything much larger than a cradle or a sewing machine. Yet if it seems expedient, even such a cubbyhole can be transformed with the exercise of a little taste, though the quarters be close. One point that should be observed is that wherever the location of the room, however limited its dimensions, and however simple its furnishings, it is associated with a certain respect which appears in this designation as a Prophet's Chamber. Its occupant need not feel in any way slighted, but quite the reverse. In that room he is, as it were, admitted in a special way into the intimacy of the household.

The room of the New England hostess was small, as befitted its character. It was furnished as the description indicated. A low cot bed by the window invited rest. The ancient slat-back chair, a cherished heirloom was drawn up comfortably near the bed. On the broad sill a bowl of blossoms bespoke thoughtful expectation. The floor was bare save for a home-made braided rug. The mahogany table in the corner had two drawers, which supplied in a measure the lack of a bureau. In one drawer were tucked away a few accessories such as pin cushion, hand glass,

(Continued on page 186)



A low cot by the window invited rest. The ancient slat-back chair, a cherished heirloom, was drawn up comfortably near the bed



There is little beside the bed, table, stool and candlestick of the biblical description, but there is a subtle charm about the Prophet's Chamber



Not all the vegetables need be limited to the very short season when they may be picked ripe; if properly stored you can prolong their period of freshness

Storing Vegetables and Fruits

THE CARE AND PRECAUTIONS NECESSARY TO KEEP FRUIT AND VEGETABLES THROUGH THE WINTER—WHAT KIND OF A STORAGE ROOM OR FRUIT CELLAR TO BUILD

BY M. ROBERTS CONOVER

Photographs by S. W. Fletcher and others

THE preservation of fruits and vegetables is difficult only when heedlessly attempted or when one lacks the right equipment. After breaking contact with the soil or the parent plant, winter vegetables must be subjected to certain changes to render them proof against decay for a time at least. The methods of preserving raw products either deprive the product of heat above a certain temperature, or of moisture in a warmer atmosphere, according to the requirements of the fruit. In the case of apples and pears, the low temperature retards the ripening process thus postponing decay, but with certain classes of vegetables the ripening must be perfected by heat and the absence of moisture thus toughening the outer skin so that it protects the flesh.

All fruits and vegetables must be so handled that no bruises are made on rind or skin and no injury by sun-scalding or by freezing. One storeroom cannot meet the needs of all fruits and vegetables. The attic will house strings of peppers and bundles of herbs, but it is too variable in temperature for fruits on tubers.

The root cellar is ideal for barreled apples, Irish potatoes, carrots, beets, etc., but too damp for sweet potatoes. The warm dry air of a storeroom over the kitchen, where fire is kept the winter through, will preserve sweet potatoes, squashes and pumpkins. It is a fact, however, that no matter how careful the storage, vegetables will fail to keep where the preliminary steps were carelessly taken. For instance, winter apples and pears should have attained full size, but in favorable localities should not have ripened when gathered. The snappy weather accompanying frost retards the ripening process and favors the ultimate keeping of the fruit. After hand picking, apples and pears should be kept as cool as possible—in a building—if possible. After several days they should be sorted, boxed or barreled and stored where the temperature will not fall below 32° nor rise much above 38° in the winter.

Squash and pumpkins, cut from the vines and left lying on the
(Continued on page 188)



A cellar built into a hillside. Its walls are air spaced and by keeping things dry, cool and well ventilated decay is prevented



The root cellar is ideal for apples, Irish potatoes, carrots, beets, etc., but is too damp for sweet potatoes

The Simple Arts of Budding and Grafting

A MEANS OF SECURING BETTER VARIETIES OF FRUIT AS WELL AS LARGER YIELDS—THE UNCERTAINTY OF GROWTH FROM SEED COMPARED WITH THE ASSURED RESULTS OF GRAFTED STOCK

BY CLAUDE H. MILLER

Photographs by Charles Jones

THE possibilities of pleasure as well as profit in the home fruit garden are greatly increased if its owner understands the art of grafting and budding. Both of these processes are extremely simple and require but little skill or dexterity. The general rule of professional fruit culturists is to propagate the stone fruits by budding and the seed bearing fruits by grafting, but these laws are by no means as inflexible as those of the Medes and Persians.

In recent years great progress has been made in both of these methods of raising fruits true to name. Most of the nut trees, chestnuts, hickory nuts, pecans and so on, that we now obtain from the nurseries are from grafted stock. In passing it might be said that when the student can successfully graft a shellbark hickory scion on a wild pignut sapling he is ready to graduate. A beginner had better confine his efforts to fruit trees such as peaches, plums and apples before attempting nut culture.

Budding is easier than grafting. The latter is usually done in the spring, just before the buds begin to swell, but budding can be practiced at any time when the bark is loose enough to peel, and is usually done in mid-summer because at that time well-developed buds can be secured. To go back to fundamentals, the principle of both budding and grafting is to unite to a young growing tree of some unknown or undesirable variety, a small portion of the bark or twig of a desirable sort so that the two will unite to form a new branch which can be trained to form the head of the tree. It is one of the mysteries of nature that although the stock upon which the graft is made may be a comparatively large tree, and the bud or scion which is grafted no larger than a pin head, the ultimate tree which will grow from this union will possess the qualities of the tree from which the scion or bud is taken, and not be

influenced at all by the stock upon which it grows after budding.

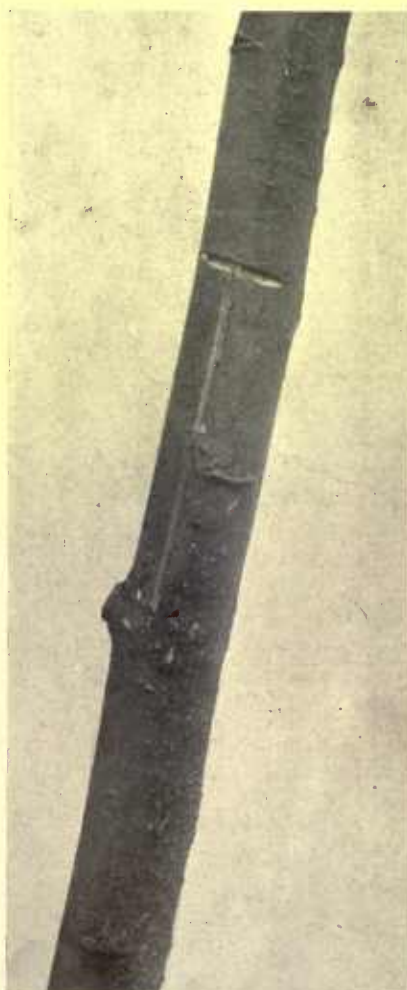
The practical value of propagating fruits in this way instead of by growing from seeds is due to the fact that if we attempt to grow a tree by planting the apple seed for instance, we can not be at all sure that the tree which may grow will bear fruit at all similar to the kind which bore the seed. It all depends upon the kind of pollen the bee was carrying that effected the fertilization of the blossom. It thus becomes pure guesswork and absolutely unreliable. Seeds from the most luscious greening or pound-sweet may produce a tree which will bear only the meanest little apples in no way resembling their parent. It is necessary, therefore, if we wish to propagate fruit trees of known varieties to resort to a method more certain than growing from seeds or pits.

The parent stock, that is, the stock upon which the budding is done, is usually a seedling tree two or three years old. All we shall need for an outfit for budding is a sharp knife, some raffia and a "bud stick." August is in most cases the best month to practice budding, as at that time well developed buds may be secured.

We must first of all have seedlings upon which to bud. These should be transplanted into nursery rows after the first season's



A plum tree graft as it looks before insertion



The T-shaped incision for the insertion of the bud or graft



The graft is fitted tightly into the cut on the parent stock

growth. If we have them in quantities we are ready to go into the culture of fruit extensively. Usually, however, the amateur fruit grower will only have a few trees to practice upon, and will use for his parent stock the seedlings that have come up along the road or garden edge. While budding may be practiced at any time that the bark peels readily, it is commonly done in August for most fruits and September for peaches. The latter may be budded on seedling stock that has been grown from a pit the same year.

A few days before budding it is customary to remove the leaves from the stock to a height of several inches from the ground. This will have a tendency to make the bark more firm when it is ready to receive the bud. "Bud sticks" are secured from the ends of bearing branches on desirable trees of known varieties. The bud itself is found at the base of the leaf petiole. In most kinds of fruit it is a tiny thing not much larger than the head of a match.

The buds must be well developed. Those near the ends of the shoots are the least desirable. The bud is removed from the stem by cutting off an oval shaped piece of bark. Use a sharp knife. The stem of the leaf may be used as a handle for the bud. It is better not to leave any wood attached to it. If cut carefully only the inner and outer bark will remain.

To bud a tree we first make a "T" shaped cut in the bark of the stock to be budded. This cut should go through the bark into the wood. Then peel the edges of the bark back and roll them slightly. The bud is inserted into this cut and firmly pressed against the peeled wood. After which it is securely bound in place with soft twine, strips of cloth or raffia. The latter is the best.

The bud will not make any growth of consequence the same year it is inserted, but if it does not shrivel, but remains green,

after a few weeks we may be reasonably sure that it is alive and will succeed. The next year when all the buds spring into growth, all the other leaves from the parent stock should be rubbed off and everything done to stimulate its growth.

In view of the fact that budding is such a simple process and one without any mystery or hocus pocus it is surprising how few gardeners understand it. There is no plant wizardry about it. Anyone of average intelligence should learn how to bud in a few minutes. The whole secret is to secure a point of contact between the green or cambium layers of scion and stock, to use healthy, vigorous buds, and do the work neatly.



It is often advisable to cut back a tree and make terminal grafts



Though twine and cloth may be used, raffia is best for tying in buds and grafts

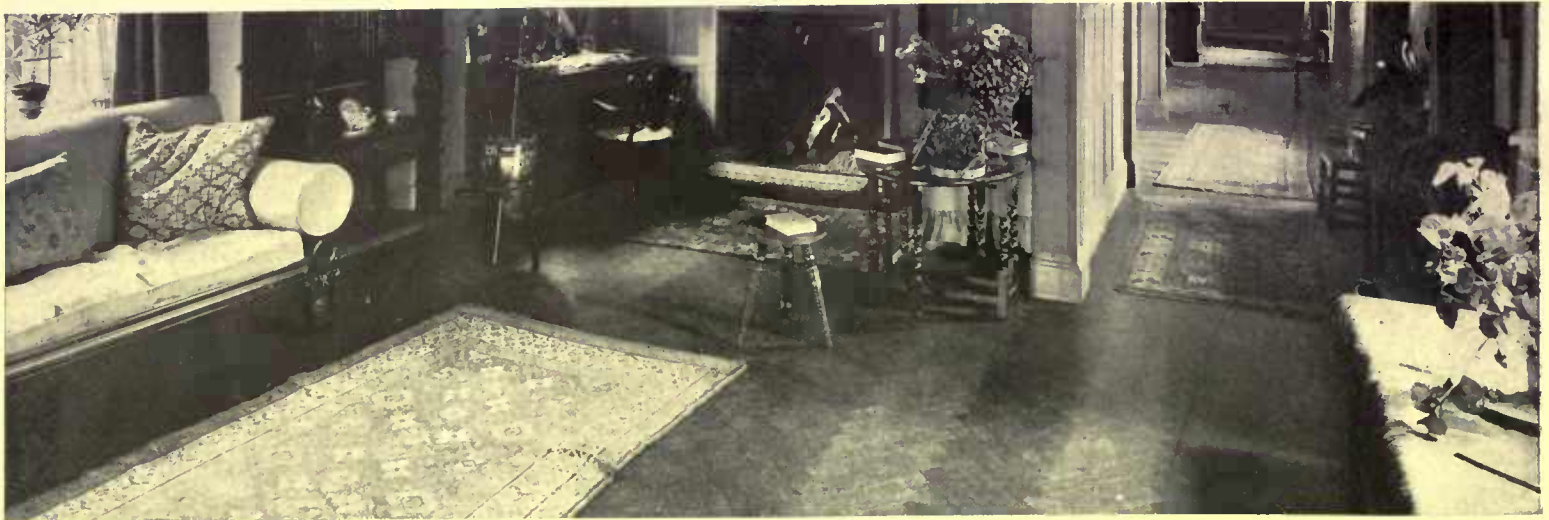


The union of stock and scion is made complete by covering over with clay



Sometimes cleft grafting with two scions is made; only one is allowed to mature, however

Although grafting proper is done in the spring, this season is the time to prepare for it. The principle of the operation is just the same as that of budding, but twigs are used instead of buds. These twigs, however, are selected for the vigor of the buds and usually are three buds in length. Ordinarily only the previous year's growth is used. These scions must be kept dormant, and to effect this may be stored in sand, moss or sawdust in a cool cellar. Where they are to be used for top grafting—that is where the tree is cut back and a new head growth planned—the scions may be stuck in the ground beside the tree. In the spring they are used in cleft grafting.



The herring-bone pattern of laying floors may be used to good advantage when the units are of narrow widths and somewhat longer than usually seen

A Revolutionary Idea in Flooring

THE USE OF SMALL UNITS AS A SOLUTION FOR THE DIFFICULTY OF SECURING A SERVICEABLE AND ATTRACTIVE HARDWOOD FLOOR AT MODERATE PRICE

BY J. CROW TAYLOR

Photograph by Leon Dadmun

FLOORING, like many other details in house designing, is more or less an unsolved mystery to the average individual, and some of the confusion about it is directly traceable to the fact that ordinarily when a magazine or technical journal goes into the subject of flooring the discussion is given over to the highly artistic and expensive type of floor. Sometimes the average reader concludes from this that the ideal in flooring is too expensive, and at other times the conclusion may be drawn from reading details of the care involved in keeping a highly polished floor in order, that it would be an uncomfortable thing to live on and would require rubber heeled shoes and rubber tipped furniture to keep it from being scarred up.

Some people may want floors of this kind, and everybody may occasionally long for an artistic floor of this high order on some special occasion, but the average house owner wants a floor that will give both satisfaction and service and leave him feeling comfortable in the matter of cost and care.

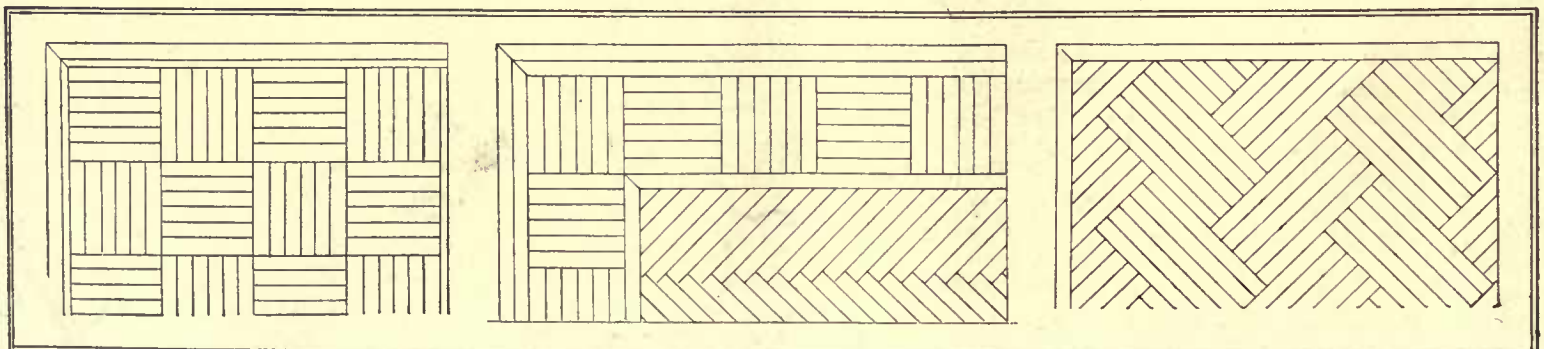
He can have it, too. It is much easier, in fact, to have a floor that is pleasant to look at, and at the same time is serviceable and comfortable, than it is to have some of the over-elaborate floors. It will give more satisfaction in the end and cost so much less that the only wonder is that more people have not heretofore gotten

entirely satisfactory floors by seeking utility rather than ornament.

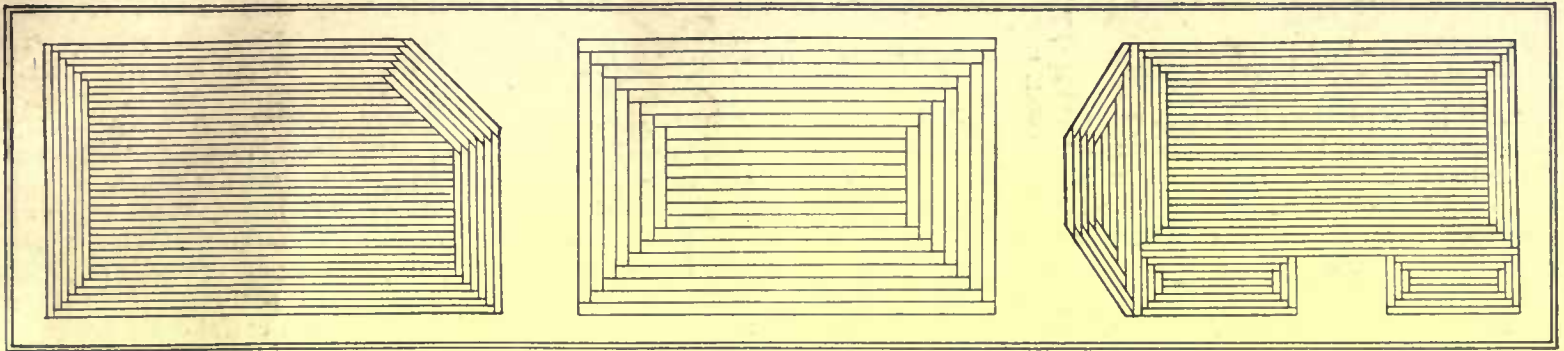
The secret of satisfaction in a floor is small units. That is, narrow widths. Back in the pioneer days of lumbering and building flooring boards were made 8, 10 and 12 inches wide. Finally, when machine planing came in, the width was reduced to 6 inches and then to 4 inches, and finally to 2½ inches.

Meantime the hardwood flooring industry developed and brought with its development still narrower units. This is really a part of the explanation of the success and the improved appearance secured by the use of hardwood flooring. It was the introduction of narrow units and the elimination thereby of unsightly cracks. The units were reduced down to 2¼ inches and 2 inches on the face, after being finished, and now there is coming a new era with still smaller units.

The popular width in flooring today among those who have followed it out to a logical sound basis, is 1½ inches wide on the face. This is to be had right along in oak flooring, and soon it will likely be available in practically all woods. When it is, everyone can have a satisfactory floor, no matter whether it is made of oak, maple, beech, pine, fir, gum or other wood. A floor made up of narrow strips carefully put together cannot shrink enough in any one given strip to cause unsightly cracks. Consequently,



Floor patterns need not be elaborate or involved in design to be attractive. Simplicity serves here as well as in other decoration



The long and narrow units give an opportunity for distinctive design and refute the general statement that they cannot be handled for borders or irregular floors

it can be finished off with varnish and either used bare or with rugs, and it can be made cheaply enough that if desirable it can be covered with carpet in the winter.

Carpenters and builders do not as a rule advocate these extreme narrow units in a floor. It is not to their direct interest to do so, because it takes more nails and more time to put the floor down, but eventually they will have to come to it; besides where the flooring is rightly made and is end-matched, the joints can be made anywhere regardless of whether they are over a joist or not, and in this way it does not require a great deal more time or even as much waste in lumber to lay a floor as with 4 inch stock.

In building a new house one of the best plans is to lay all the plain floors of standard thickness, 13/16, up-stairs and down, with stock only 1½ inches wide. This gives a neat appearance and safeguards against unsightly cracks. If it is a floor that is simply to be painted over, it needs no further treatment than just painting, but if a more artistic finish is desired it can be gone over with a smoothing plane or a scraper and then filled and varnished, and it makes a very attractive floor no matter what kind of wood is used.

The writer has just been through some experience with flooring in the building of a new house in which the original intention was to make the up-stairs floor of comparatively narrow widths in pine, and the down-stairs floors in oak. Half of the down-stairs, the library, kitchen, and side hall was to be finished with plain thick oak of common grade, and the parlor and dining room with thin oak flooring laid on top of a sub-floor with a striped border and rug effect, and the front hall with parquetry and borders.

The up-stairs floor of 2½ inch pine was laid first. Then, the plain oak floor down-stairs was laid with No. 1 common 1½ inch oak 13/16 thick right on the joists.

After figuring it up and looking at it when finished the pine floor which had looked fairly well at first was decidedly disappointing as compared to the oak floor in narrow strips, because after the heat had been on in the house for awhile it showed cracks, whereas there is hardly a crack visible in the oak floor. What made it all the worse, too, was the discovery on casting up the figures that the pine floor had cost exactly as much as the oak. It had taken a little more time and trouble to lay the oak, but the cost of material was the same in each case. Therefore, if it were to be done over again all the plain floors up-stairs and down would be laid in No. 1 common oak 13/16 of an inch thick and scraped and finished with a filler and varnish using

a special varnish on the kitchen floor to stand mopping with water.

After this experience when it came to finishing up with the porches there was involved about a thousand feet in porch floors. This instead of being made of pine, cypress, or even of concrete, was made of the same stock used in the kitchen and library, 1½ inch face 13/16, No. 1 common oak, and painted.

It would be in order to digress for awhile here on the subject of porch flooring to say that for a porch that is up off of the ground and can be mounted on piers and the air allowed to circulate underneath, a good wood floor is much more satisfactory than one of concrete. It is healthier and really looks neater. Moreover, it will last if kept painted. That is the secret of wood-work exposed to the weather; keep it painted. Renew the paint on it every year, and it will last indefinitely. And in this way a good solid wooden floor with air circulating underneath will perhaps last as long in a porch as a concrete floor.

Where a man does not intend to go into artistic borders and rug effects in his floors he can get a neat floor that will justify finishing off with varnish and wax by using 1½ inch stock. If he has a new house he can use it in standard thickness without a sub floor by having it end matched and let the joints come wherever they will. If it is in an old house and it is desired to put the floor on top of an old floor take a thinner stock, take ¾ inch strips 1½ inches wide and he can get border effects.

It is the original floor construction particularly in mind now, however, and one strong point it is desired to emphasize is that it need not cost any more to get a floor that you can be proud of, than it does to get an ordinary floor that you have to cover up with carpet. Go to your planing mill or lumberman and insist on getting narrow stock. It doesn't matter whether it is oak, pine, maple or beach, you should insist on the narrow units just the same, as this is the secret of getting artistic effects in an ordinary floor. It is the one thing that eliminates the unsightly cracks and makes the floor attractive.

The oak floor, where it can be had at anything like reasonable

prices, is more durable and more satisfactory generally, and if you are anywhere near the oak territory you can get what is called the No. 1 common grade of oak at about the same price you can get good common pine. This is a grade that has sound knots, some small worm holes, and little rough places in the flooring, and some bright sap, but by throwing out a few pieces and selecting and fitting your stuff up carefully you can get a floor that when filled and fin-

(Continued on page 187)



The wide cracks in the old-fashioned floors, which one was so accustomed to see when the twelve inch boards of pioneer days were used, are obviated by the use of narrow widths

What Type of Heating?

BY CHARLES K. FARRINGTON

THIS is the problem that faces every house builder, and also any owner who must replace a worn-out furnace. Each of the three forms of heating most used at present, hot water, steam and hot air, has its enthusiastic adherents, but there are some special cases in which each system appears to have arguments in its favor over the others.



A man whose business was building houses and then renting them told me that he would not use steam or hot water in any of them. This was not because he did not highly value these forms of heat, but he had found by costly experience that if these systems were carelessly or improperly managed (as is too frequently the case in rented houses), they would be damaged far beyond that which hot air plants would be under similar misuse. Here a certain heat seems best, not because it is considered superior, but on account of local conditions; and in any home where no thought or supervision can be given the furnace by the occupants whether they be the owners or not, by all means put in a hot air heater, of sufficient size to properly heat the house. By this I do not wish to give the impression that there is anything difficult or complicated in the management of a steam or hot water heater, for this is far from being the case, and anyone can easily learn to care for them, but their construction is such that if they are misused, they will be much more likely to be injured than will a hot air one. For example, the writer knows of a hot water furnace which has an automatic attachment for opening or closing the draft and damper according to the state of the fire. But the occupant of the house (who was also the owner) would on cold winter days detach this arrangement and open the draft wide, and also a large door underneath, which was only intended to be used for taking out the ashes. This he did simply because he desired as much heat as possible in a hurry. Such treatment was very injurious to the heating system, and warnings had to be given him that a continuance of such practices would be likely to prove costly. I have seen steam furnaces which were abused in a similar manner, and have known fires to be lighted in both steam and hot water heaters with no water in the boilers. But where steam and hot water heaters are managed with a small amount of care, they are very desirable for house heating in the average home.

It is well to use a hot air heater when a sufficient supply of fresh air cannot easily be obtained from outside. This is a strong point in favor of the hot air system, as it constantly supplies fresh air without bringing the chill of outdoors into the house.



We will now suppose that a person decides to use either a hot water or a steam furnace; what are their good points? It is possible to heat a house well with steam no matter how cold the weather may be, if the heater is large enough, and it will also heat up rapidly in the mornings after the fire has been cleaned, and the draft and damper adjusted; but a steam heater requires more attention than a hot water furnace does. I have found from careful observation that it is necessary to coal a steam furnace on an average of every two hours when heat is needed in cold weather. This is caused by its construc-

STEAM VERSUS HOT WATER

tion; for you cannot obtain steam without draft, and when you have the draft opened you must burn coal in large quantities, and yet it is not possible to put a large amount on at one time, for if you do you will cause the steam pressure to fall; so the only practical way seems to be to put on coal in moderate amounts at frequent intervals. With a hot water heater, it is possible to put on a far greater quantity at one time, and as heat is obtained without having so much draft on the fire, it can be coaled every five or six hours, even in cold weather. It would be beyond the scope of this article to enter into a technical discussion as to why this is, but I will give an illustration which can be understood by every housewife. When you have a low fire, with all draft closed below in your kitchen range, you can still obtain some hot water in the boiler. But when you have the draft opened as is usual on ironing days, do you not often have to open the hot water faucet in the sink to allow the steam which is then generated to pass off? Now apply this reasoning to a steam furnace; if you have a low fire without the draft being opened in it you will obtain no heat in the radiators, in fact you might as well have no fire; and before steam can be raised you must have a good fire with plenty of draft. As everyone knows, water must be heated to 212 degrees before steam can be generated. But in a hot water heater if the water is heated to only 80 degrees you will obtain some heat in the radiators, and if the system is well designed and sufficiently large, 140 degrees will heat a house well, even on a cold day. So remembering this we simply use a very large heating surface in the radiators, and also a heater of large enough capacity always to supply them without being forced.

An important consideration is the size of the radiators. When you figure the heating surface of your radiators be sure and have them large enough. Do not be afraid of your being too warm. You can easily and economically regulate this at the furnace by having a large or small fire as required. When you have figured the total heating surface of the radiators add twenty-five per cent. for the heating surface of the pipes leading to them, and also twenty-five per cent. for a margin of safety on the side of excess heat. So many people do not figure this last item, and so obtain an outfit which will never be satisfactory. They may be able to heat the house if the fire is continually forced, but only by burning a large amount of coal. Let me give the following examples:



Well Designed Heating Plant. Poorly Planned System.
Heating surface radiators.....800 feet.....800 feet
" " mains. 200 "200 "
" Margin of safety excess heat 200 " none allowed 000 "
1200 " 1000 "

So for the first example a heater supplying 1200 feet would be required; but let us suppose that the nearest size made to this was 1150. Then by all means use the next size above. Always be on the safe side as regards excess heat. The slightly additional cost of the heater will soon be made up in the coal burned. But so many plants are figured according to the second method shown, and they are invariably disappointing. It must be remembered that in a well designed plant it is planned to heat the house by having a large heating surface in the radiators heated by moderately hot water. This allows you to have a much smaller fire than

(Continued on page 189)

Growing the Milkweed for Food

BY GRACE ASPINWALL

Photographs by the Author

WE are constantly adding new food-stuffs to our list and one of the newest is milkweed. It has proven itself so delicious and healthful that we can only wonder at our long neglect of a staple left to grow wild in pastures and roadsides.

Milkweed is now being cultivated for the market and, by proper planting, the tender shoots are to be had into October, whereas in the wild state they are past their tenderness in June.

The flavor of the milkweed is almost exactly like that of asparagus; a blindfolded person given it to eat would pronounce it asparagus. It is, however, an even richer vegetable than the asparagus, as its stalk and leaves are filled with a thick milk that is exceedingly nutritious when cooked, or, for that matter, when eaten raw as a salad, which many people prefer, only the tips being used in this case.

For many years farmers' wives in the country have always mixed a few milkweed stalks with the mass of mixed greens which they delight to gather—dock, dandelion, mustard, etc., but they rarely use it by itself, which is after all the most delicious way, for when cooked with other greens the delicate flavor is lost.

The milkweed which is now being cultivated in gardens from seed, grows several times larger in the stalk than the wild variety, and the stalks in some cases are as large around as a quarter of a dollar; when cut for cooking about eight or ten inches of stalk are cut, with the large tender thick leaves on it. These stalks are cut into inch or inch and-a-half lengths and cooked for about the same time as asparagus, and served with butter.

Anyone who desires to cultivate milkweed in his garden can do so very easily by simply planting the seeds very early in the spring. They will grow and flourish in the most barren soil and without any attention, but if one desires giant stalks and leaves and an added tenderness and suc-

culence, one had better fertilize the soil and weed and hoe the young plants.

The lady whose picture is given here has made a great success of cultivating not only milkweed but dandelions, yellow dock and several other weeds, for which she finds a ready market among her friends. She was led to the work through ill health. She was anemic and no medicine seemed to do her any good, so on the advice of an old country doctor she went into a little Connecticut farming town in the spring and lived on tender greens and dairy products. She ate milkweed, dock, dandelion, plantain, tender young horseradish leaves, wild mustard and nettles, not to mention clover, both tender leaves and blossoms, which she ate as salad and found them very peppery; in fact clover leaf salad eaten in a large quantity will take the skin off the throat.

All these wild weed foods strengthened her so quickly and so perfectly that she made a study of cultivating them. She declares that we are just beginning to learn the wonders of weeds, for about our door-yards and pasture fences are to be found no end of delicious materials for tempting dishes.

All these things may be kept at the tender age for the table by different planting periods, just as peas and string beans are.

Although the milkweed is so common it may be well to state here that the variety *Cornuti* is understood in this article as the milkweed for cultivation. Its leaves are broader and softer than other kinds and its flowers a dull purple in large nodding umbels. The swamp milkweed (*incarnata*) is useless as a food, as its leaves are tough. It may be differentiated by its rose purple or

flesh tinted blossoms, and lanceolate instead of oval leaves.

Just try milkweed next spring and see for yourself how delicious it is. You will grow a plant that is decorative as well as useful.



Seed-pods of the despised milkweed, which when cultivated makes an excellent green for cooking or for salad



Under cultivation the milkweed, like most other wildings, thrives like the proverbial bay tree



The stalks are cut when young and tender



A pan of the stalks and tender leaves for a salad



Colchicums make a very effective display when grown in masses and will do very well in a grass lawn if it is not mowed too frequently

A Bulb That Will Prolong the Fall Garden

COLCHICUMS WHICH LENGTHEN THE BLOSSOMING SEASON—A HARDY FLOWER THAT NEEDS LITTLE ATTENTION AND COMES UP YEAR AFTER YEAR

BY FLORENCE BECKWITH

Photographs by Nelson R. Graves

PLANTS which prolong the blossoming season and tend to adorn the garden in autumn are generally welcomed by all flower lovers. The colchicums most emphatically possess this attribute. Once planted they never fail to present themselves, and their delicate but cheerful coloring is very attractive. Much is said of the desirability of planting the crocus to brighten the garden and the lawn in the early spring days, but the colchicums, although equally desirable for the fall garden, receive but small attention. They are perfectly hardy and once introduced can be depended upon for a fine showing year after year, through all vicissitudes of fortune and even utter lack of care.

One pretty garden, of which the owner was justifiably proud, had a bed of these flowers. Circumstances required the surrendering of the garden and removal to the city. A visit, after fifteen years had passed, showed the colchicums still living, though they were all that remained to tell the tale that a garden once flourished there, and they were growing in the grass in the hardest of soil.

In another garden some colchicum bulbs were taken up to be

planted in another location. It was supposed at the time that all were removed, but small ones must have been left in the ground which later was set out to raspberries. The colchicums, however, did not propose to yield their right of previous possession and every fall bloomed profusely around in the grass among the berry bushes. The pinkish-lavender and pure white flowers made a very pretty show in the grass, and the bulbs seemed to blossom earlier and more profusely than those in the garden beds; the flower stems, too, were longer than the ordinary ones.

The colchicums make a very effective display when grown in masses, and they can be recommended for growing in grass if it is not often mowed. When once established they should not be disturbed for years, unless necessary, or unless the flowers show signs of deterioration.

The manner of growth of the colchicum and the way in which the seed is produced are very peculiar. In September the buds appear and the flowers are soon in bloom without a green leaf to protect them from the winds and storms of Autumn, which they bravely face and from which they never seem to suffer harm.



The flowers are much like the crocus, varying in color; some are white, some pink and others checkered lilac, purple or white

In October the blossoms die down, leaving no trace of the plant. There would be no time for seed to ripen, and, by a curious provision of nature, these are buried all winter within the bulb. In spring a fruit stalk with lily-like leaves appears. This makes a rapid growth and the seeds ripen about the first of June, after which the plant again dies down to be resurrected in September in the pretty, lavender and white flowers.

In form the blossoms are like the crocus; in color they vary; some are white, some a pale rosy pink or pinkish lavender, and others are curiously tessellated or checkered lilac-purple and white. Each bulb will produce a number of flowers, often six or eight in succession. The bulbs are so determined to blossom that if taken up just before blooming and placed in pots or baskets of moss, they will go on flowering as if nothing unusual had occurred, and will even produce flowers if the bulbs are not planted at all. The single forms are more commonly cultivated, but there are very pretty double varieties.

One plant which produces double flowers has

(Continued on page 191)



A double form was found to bloom somewhat later than the single varieties. Its first blossoms were purple, but the later ones were white

A Combination Hotbed and Storage Pit

AN INGENIOUS CONSTRUCTION WHICH PERMITS THE HOTBED TO BE USED FOR COLDFRAME, STORAGE PIT AND EVEN AS A BROODER FOR SPRING BROILERS

BY RICHARD MAXWELL WINANS

WHEN we built the combination bed and pit shown in the accompanying drawings, we found that while our original intention had been considerably more than met in the design, later developments demonstrated that supplemental uses were of even greater practical value.

The plan was conceived in an emergency as an expedient to save a valuable lot of large plants of various tender vegetables which, because of an unusually backward spring, were being crowded to death in the limited confines of the hot-house. That emergency was a blessing in disguise, since it has enabled us to so greatly profit by the resulting invention.

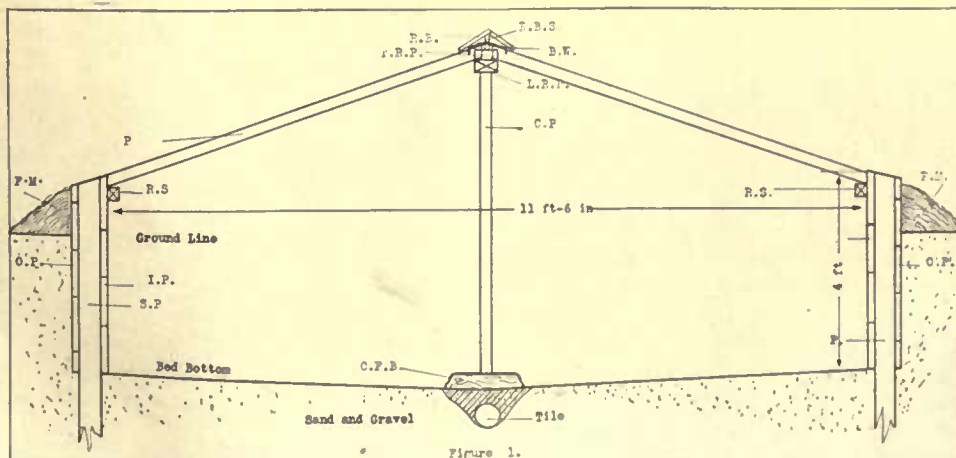
Our first frame was built to accommodate tomato plants in bloom, together with eggplant, pepper, muskmelon and cucumber plants ready for the field. When the weather permitted their removal to the open there was no further use for the bed and a suitable number of plants of each were left in the bed, where they were forced to fruit days in advance of those transplanted to the field. After that we constructed an extra run of this bed for

the purpose of fruiting such vegetables under glass, and we have yet to record a single failure.

As our experience with this frame progressed we found it admirably adapted to other uses. Aside from serving the purpose of a cold frame, in which lettuce, radishes, spinach, young onions, etc., may be grown in late fall and early spring, it is a forcing bed *par excellence* for growing and fruiting such plants as tomatoes, eggplant, cucumbers, etc., far in advance of those grown in open culture. And as a true hotbed it seemed so much better than the ordinary "single-run" bed that we at once abandoned the old type.

The main advantage for all of these purposes is the increased

amount of air space, the possibility of securing a freer circulation in ventilation during the day and the confinement of a greater volume of heated air during the night, together with the advantage of the ample head-room of a small hot-house, in which laborers may carry on the work of transplanting, weeding, etc., during the roughest weather, having the sash



A cross-section through the structure, giving the more important dimensions. The abbreviations are referred to in the text

closed tight against influences of rain or wind.

Then, too, unlike the ordinary hotbed or cold frame, it need not be idle through the severe winter months, for by removing the glass sash and substituting boards lengthwise on the rafters to hold a covering of litter and earth, it is converted into a practical and convenient storage pit for all sorts of root crops, potatoes, onions, cabbage, celery, apples, etc., that is more satisfactory than a cellar and much better than trenching or banking, since one may have ready and easy access to the contents in any and all kinds of weather without disturbing or exposing more than the qualities or varieties desired.

It was left to a neighbor, however, to adapt this frame to a use which has the distinction of being at once unique and profitable—that of raising hot-house spring broilers. Having in mind the possibilities of protection and warmth of this bed as a nursery, brooder and forcing house, the first broody hens were encouraged to set and the resulting broods at once put under cover of the glass roofed frame.

The result was that they had broilers ready for the table about the time others were beginning to arrange to set their hens and start their spring incubators. This scheme for raising hot-house broilers worked so successfully that they have increased their beds each year and are now profitably growing extra early broilers for market; a market among a class willing to pay fancy prices for such choice specimens, the demand for which they have never been able to meet.

In a similar manner late fall broods are handled in these frames so as to produce broilers for use up to the Christmas holidays.

Another practical advantage of this frame is that when built in one long section—the most desirable form—it may be divided into subdivisions or compartments, of such size as desired, for the purpose of maintaining various temperatures, or for different purposes, such as coldframe, hotbed, vegetable or poultry forcing house, etc. For ease in handling these partitions should be built in two sections of matched lumber, to permit of being readily placed or removed.

This combination frame may be built of any length found desirable or convenient, from one to accommodate a few hotbed sash to a bed two hundred feet long or longer. The prudent builder will locate his bed or beds so they may be added to in length as required.

Convenience to an abundant sup-

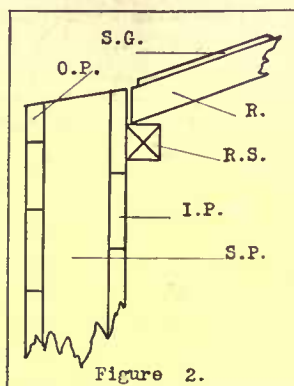


Figure 2.
Detail section at top of walls, showing rafters and rafter rail. These are dropped below the top of wall to let the sash project

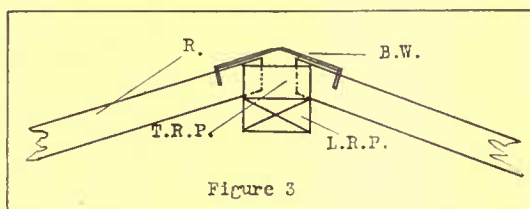


Figure 3
Section through ridgepole showing how the rafters are notched in and wired

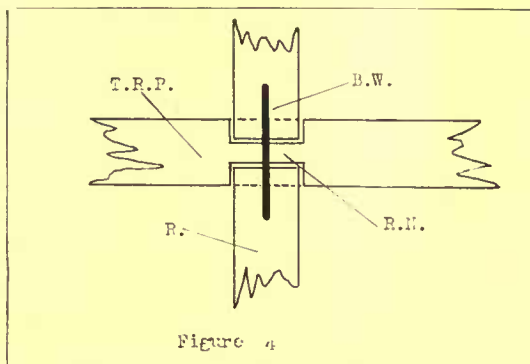


Figure 4
The top member of ridgepole is notched to receive the rafter ends, a bent wire holding them together

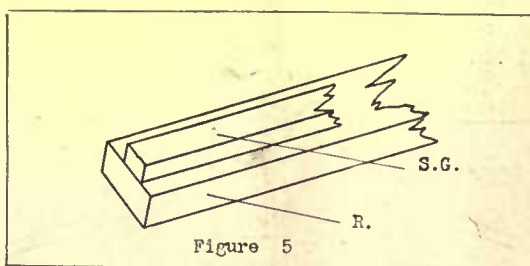


Figure 5
The sash guide strips attached to rafters are saturated with linseed oil and painted before put on

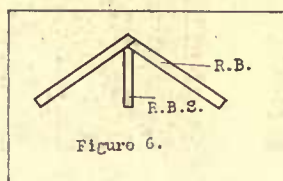


Figure 6.
A device to cover top of ridgepole

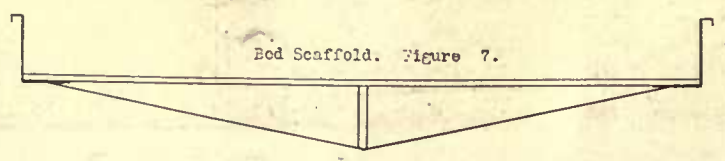


Figure 7.
For weeding the beds and such work, a movable frame slides along on the benches

ply of water is one of the first considerations in selecting a location, which should be a site having good natural drainage. The bed should be, although not necessarily, set to run north and south, to permit the sun to reach every portion of the bed soil at some time during the day. It is well if the location is sheltered from the north winds.

Because of the width of this bed, when built of any length, the earth removed in making the excavation may be loosened with a plow and taken out with a two-horse slip scoop or wheel scraper.

The best time to build the frame is in the fall or after the season's work is well over and men and teams are somewhat idle; or any other time during the year when the ground is not frozen solid.

Having determined upon the number of sash to be used, and, therefore, the length, lay out the ground lines fifteen feet wide for excavation. Although bed is only about thirteen feet over all, free room is desirable for setting and lining posts without crowding the banks of trench.

A depth of not less than three feet is advised, especially where tomatoes are to be fruited in the frame. The sides are to extend about eighteen inches above ground level, which will allow a soil filling of eight to twelve inches in the coldframe or forcing bed, or a good depth for fresh manure when making up hotbed.

The floor of the bed should slope from sides to center but be level the length way. Since it is absolutely essential to have a dry floor when the bed is used for storing crops we found it necessary to dig a ditch in the center lengthwise and lay a three-inch tile in fine gravel for drainage purposes.

The inside of the bed is eleven feet six inches, and posts are set to allow for the thickness of inside boards or planking, *i. p.* The outside, *o. p.*, may be covered with any old plank or boards available. To insure a perfect alignment the posts, *s. p.*, should be sawed, at least on the inside face, and set at least three feet deep to secure permanent rigidity, and if "puddled" tamped all the better.

The inside alignment of posts must be absolutely perfect, or there will be trouble with rafters bucking or dropping, from the very beginning.

Aside from the material for the walls the lumber for the skeleton of frame, the rafter rail, guide strips, ridgepole, ridge boards and center posts must be

of thoroughly seasoned stuff with straight edges and free from warp.

The rafter rail, *r. s.*, is of 2 x 2 in.
(Continued on page 191)



The form of the broken pediment over this doorway lends dignity to the apartment by the use of simple lines. There is little detail work here



The reeding and detail around this door are typical of the best Colonial work. The garlands were seldom carved, but were of papier maché and very lasting



The spider-web fanlight is often used by modern builders. It gives a lighter effect than the imposing pediment in the first illustration

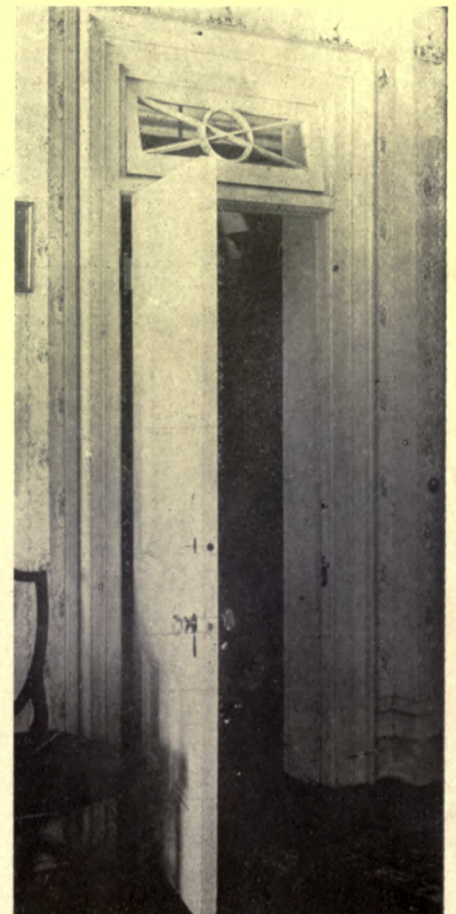
TYPES OF INSIDE COLONIAL DOORS



All the decorative effect of the wood texture in this mahogany door is set off by the white framework



Such treatment as this successfully shuts off a room from the hall without the disagreeable or darkening effect of solid doors



The slight decoration in this transom adds the note necessary to complete the impression of a Colonial room

Facts and Figures in Connection with Outside Painting

INFORMATION THAT THE HOUSE OWNER SHOULD HAVE BEFORE HIS HOUSE IS PAINTED—THE BEST SEASON FOR THE WORK AND THE BEST MATERIALS TO USE

BY GEORGE E. WALSH

Photographs by P. H. Humphrys and others

WITH every recurring season the question of painting the house causes more or less concern among house owners who wish to keep their place in good repair at all times both for looks and protection. No hard and fast rule can be laid down as to how often the exterior of a house should be painted, for that is something decided largely by climate, the condition of the paint, and the thoroughness of the last job. In high and dry climates paint retains its color and usefulness longer than at the seashore where the disintegrating effects of salt and moisture are always at work. Some houses need repainting every second or third year, while others may not require it oftener than every third or fourth year.

The early fall of the year is considered by most architects and painters the best time to paint the house. October is one of the best months, for it is a quiet month, with few heavy winds to blow up dust, and most of the insects of summer are dead or hibernating. There is little danger of heavy frost to injure the paint. One paints his house to protect and beautify it. The selection of colors must therefore be a matter of individual taste, but to protect the woodwork there must be good paint material and good workmanship.

The composition of colored paints, however, should be understood in a general way by the owner of a house. The white paints consist of white lead or oxide of zinc, and combinations of such inert materials as barytes, gypsum, whiting and silica. The only durable black pigments are lamp black, gas and bone blacks. The red pigments consist chiefly of the iron oxides and red lead, but often the coloring of these are heightened by mixing some of the aniline dyes with them. The aniline dyes are misleading, for they give an artificial brilliance to the color of the paint, but they quickly fade and cause disappointment. The yellow pigments are the chromes and the ochres. The former are the brighter in appearance, but not so durable in effect. Aniline dyes are sometimes mixed with the yellow paints to add to their brilliant lustre, but they should not be accepted for permanent work. Blue paints

are made from the Prussian blues and the ultramarines, and the greens from combinations of Prussian blue and chrome yellow. The brown paints get their colors from the umbers, siennas, and the so-called mineral browns. They are all very durable.

Pure linseed oil should be used for mixing and emulsifying the paints. A good many cheap substitutes are used, such as petroleum oil, cotton-seed oil, rosin oil and fish oil. None of these gives the same permanent results as pure linseed oil. No known substitute has ever been found to take its place and give the same excellent results. Turpentine and benzine can be used in the paints in small quantities to reduce the thickness of the pigments to good working condition without any particular harm. They are also used sometimes to hasten drying and to secure the "deadness" of surface. Both the benzine and turpentine are volatile, and they disappear and do not remain in the dried coat of paint. But even their use should be limited to actual needs.

In painting a house contractors usually figure that the cost of the labor represents from two-thirds to three-fourths of the whole cost of the job, and where there is a good deal of cornice, sash and ornamental painting to be done the cost of the labor even exceeds this proportion. So the paint after all is not the all-important part, and one should therefore insist upon the best and also upon good careful workmanship. The covering capacity of a gallon of paint is a matter that depends a good deal upon the condition of the house to be painted. On a new house the wood service absorbs the paint much faster than on a surface that has already been treated. If ten pounds of white lead will spread over 221 square feet of surface, the usual estimate, the same amount of material in a second coat will spread over 324 square feet. A painter under average conditions figures out the total surface area to be painted in square feet, and then divides this by 18. That gives approximately the number of pounds of white lead in oil that will be needed to do a good three coat job. For a two coat job divide the number of square feet by 200, and the result will give approximately the number of gallons of white lead paint



Paint is not only an insurance against deterioration but is a certificate of good standing. These houses of similar style owe their different appearance to the fresh painted boards of the house on the right

needed under ordinary conditions to finish the work satisfactorily.

But this quick method of computation is misleading unless the condition of the wood is considered. Some very porous, knotty wood will absorb paint to an alarming extent. In order to prepare such a surface properly all knots, cracks, and nail holes must be puttied up. A painter who intends to skimp on his job can easily spread good paint over a much wider surface by thinning it with turpentine or benzine. It is in this work that the use of these two ingredients can be made harmful and injurious. While they do not dry in the paint, they spread it over so thinly that the wood has little protection.

Parts, if not all, of the exteriors of many modern houses are stained or finished off in the natural woods today, and this naturally increases the difficulty of making proper estimates on the cost. Most woods need some treatment to alter the color, and the process of deepening the grain or changing the color without injuring the grain or raising the surface is a somewhat delicate one. There are many kinds of stains used for exterior and interior work—oil stains, water stains, alcohol or spirit stains, acid and alkali stains, pigment or wiped stains, wood dyes and the fuming process. Most of these stains are for interior work alone, but many of them are used for piazzas and porches. Oil stains are really nothing more than thin paints mixed from colors that have a transparent nature such as sienna, umber, ochre, Vandyke brown or the lake colors, which are of vegetable or aniline origin precipitated on a base of whitening. Many varnish stains consist simply of varnish mixed with ground dry pigments, and they are entirely unsuitable for the finish of houses inside or out. They may do for touching up furniture, but not for house trim. Another class of stains consists of varnish colored with aniline dyes. They may have their usefulness, but not for house painting or staining. The colors soon lose their brilliant tone.

Exterior stains and varnishes must all be of a durable nature, and the best are none too good. For porch columns, outside door, window sash and the like only good spar varnish should be used. A good spar varnish costs from four to five dollars a gallon, while interior varnishes may be had for two or three dollars a gallon. To use the latter for exterior work is waste of time and labor. It is economy in the end to use only the best spar varnish

for all woodwork exposed in any way to the weather. In the carriage trade they have evolved what they call coach varnish, and sometimes this is recommended for exterior house work; but while superior to the cheaper inside varnishes it is not nearly as satisfactory as a fine grade of spar varnish. This coach varnish applied to porch columns will begin to check and crack within a few months.

No matter how good the varnish is, it cannot be expected to last on an exposed piazza, except on the ceiling or protected sides, much longer than eighteen months or two years without renewal. A good many property owners appear to be ignorant of this fact, and when the varnished surface begins to wear off after a year and a half they blame the painter. One should face this fact at the beginning. A varnished exterior surface will need re-touching after eighteen months as a rule, no matter how good the material originally applied. Most var-

nishes dry too quickly for permanence. They dry by the oxidation of the oil in them, but they also perish by rapid oxidation and lose their lasting qualities.

Wherever varnish is left exposed to the weather it should not be rubbed down to deaden the gloss. It must be left bright, for rubbing down cuts through the varnish film and permits the air to get inside and disintegrate it rapidly. The dead effect of varnish in exterior work is obtained quickly enough by the action of the weather and it should never be artificially hastened. Where several coats are applied, the first two may be slightly rubbed down to secure a smooth surface, but the last one should be left glossy and bright.

One may make a rough estimate of what it would cost to paint his own house or to have it done by a professional painter. Contractors generally have their own way of figuring the amount of surface space to be covered and

then set their prices per square yard for the work. Their estimate of surface area is based upon the general character of the house. Thus on clapboarded walls they estimate the number of square feet and then add one square foot to each square yard to allow for under edges of boards. Cornices are measured by length and breadth, and then one-half more added to make allowances for the under surfaces of curves and edges. Outside blinds have their height multiplied by twice the girth for sta-

(Continued on page 193)



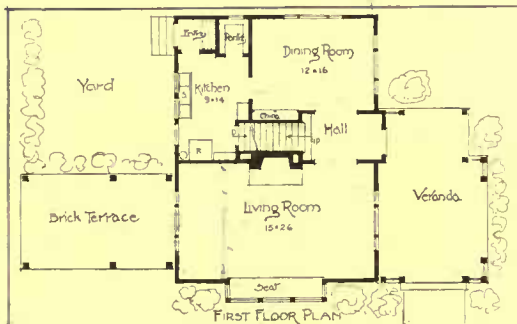
With a good white paint upon the walls and a good green on the blinds, this house is not only kept in good condition but it reflects a cheery, welcoming atmosphere



In contrast to the similarly built house above the stained and weathered walls with bleached blinds here give the impression of desolation and poverty. Painting has been put off too long



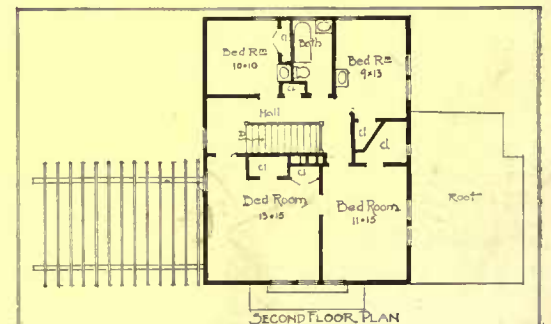
Mr. Smith's home is a charmingly informal one that is based on no distinct architectural style. It is another object lesson in favor of a perfectly straightforward development of the plan in simple materials



The first floor plan is exceptionally compact, with its simple staircase and no waste hall space

THE HOME OF MR. RUFFIN A. SMITH RIVER EDGE NEW JERSEY

John A. Gurd, architect.



Lavatories are provided for two of the bedrooms—an instance of foresight that is far too uncommon



In the living-room, with its simple dark woodwork and rough, warm gray plaster walls, the paneling of the lower part of the walls merely by the use of vertical strips from baseboard to plate-rail, is particularly interesting



The spring-house as it was

THE TRANSFORMATIONS OF TWO OLD STONE BUILD- INGS ON THE ESTATE OF MR. W. E. HERING ABINGTON, PA.

Oswald C. Hering, architect.

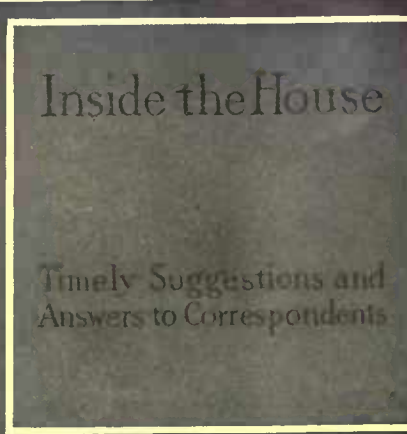
Above and to the left is shown an old stone spring-house that stands on the edge of a pond. There is a very fine swimming-hole nearby, so the upper portion of the old building is now fitted up with dressing-rooms for the bathers

The other two pictures and the cover of this issue show the transformation of an old smoke-house into a picturesque and comfortable studio



The smoke-house as it was



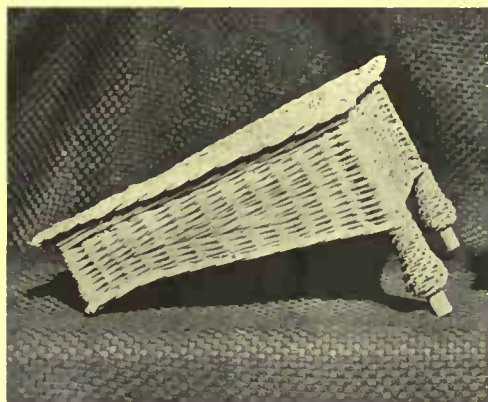


The Editor will gladly answer queries pertaining to individual problems of interior decoration and furnishing. When an immediate reply is desired, please enclose a self-addressed stamped envelope.

Willow Seats for Steps

SMALL willow seats designed especially for the stoops of city houses or for piazza steps are among the newer conveniences that promote outdoor comfort. They are as substantially woven as are the willow chairs, and are like an ordinary footstool in shape, except that they have legs at but one end. These legs rest on the lower step and support the front of the seat so that a firm level surface is had, and the seat fits snugly over the step.

They are decidedly more comfortable than the straw mats sometimes used on



The small willow seats are as substantial as chairs and yield as much comfort without taking up as much space

steps and much cleaner than porch cushions, which are bound to collect more or less dirt. Several sizes are to be had with slight differences in the height of the legs and the depth of the seat, so that steps of varying width may be satisfactorily fitted.

Their most attractive feature is that they are practically indestructible and can be used season after season. When soiled or worn looking they can be made to look as good as new with a coat or two of stain.

As pieces of furniture they are, of course, useful only during the warm season, for their unusual shape does not permit of any indoor service, but they occupy so little space when stored away that they are of slight consideration when the disposal of the piazza furnishings for the winter is undertaken.

Care of Screens

THE durability of screens may be greatly increased by a little care. Store in a dry place—the attic is much to be preferred to the cellar under most circumstances—and always clean thoroughly before putting away. Brush off all dust, repair any breaks, and if paint or varnish is required for the frames it is better applied before storing for the winter. When this is thoroughly dried, brush over both wire and frame with kerosene. Frequently through the summer give them the same treatment—it may be quickly done with a broad paint brush and a small can of kerosene. This cleans the wire of all dust and grease, prevents rusting, and proves disagreeable to flies as well.

Brittany Pottery

THERE are some charming peasant potteries to be had that are very unique, and for the housewife or hostess who wants something unusual nothing could be prettier for a breakfast or luncheon service or for an afternoon tea set. It might be possible even to collect a variety of pieces, enough for a dinner set, but one would experience some difficulty in doing this.

The peasant potteries, of which the Brittany ware is perhaps the most charming, are made by the peasants of various countries when the cold weather forces them to abandon their work in the field or on the water. The making of these potteries not being the principle occupation of the people and the time which they devote to its manufacture short, the quantity made is necessarily very limited. But even if little time is spent in the manufacture, none of them is without a certain beauty, which though crude is not without its artistic value.

The headquarters for the manufacture of Brittany pottery is in the locality of Quimper, in the department of Finisterre, northwestern France.

Brittany pottery has a high glaze, is made of heavy earthen ware and comes in various odd shaped pieces as well as the conventional plates, cups and saucers and bowls. The peasants originate new shapes

each year, so that it is wise in buying to get all that one is apt to need at one time, at least of such pieces as cups and saucers and bowls, for the next season's output of what is supposed to be the same thing may vary greatly in size and shape.

Although all dishes which we consider necessary to a dinner set are not made in the Brittany pottery, there is quite a variety of dishes from which one may select those best adapted to one's needs. There are plates of various sizes, charming little cups which could never tip over, they are so squat. These have the quaintest of designs: yellow flamingos, yellow birds, blue birds, roosters, quaint little ladies in full peasant skirts and peasant



"Mr. and Mrs. Quimper" dressed in their quaint Brittany costume may be had on many of these pottery pieces

caps, and little gentlemen in full breeches and broad brimmed hats. Each piece is signed with the initials of the artist and the name of the place where it is made, H. B. Quimper being a signature that is often seen. The signature often forms part of the design, and being placed under the little lady and gentleman, as it frequently is, it appears as if it were their name. I call them "Mr. and Mrs. Quimper."

Though the design on each article varies, many arrangements of line—conventionalized flowers, birds and people being the motifs—all harmonize, for the same general style of design is followed in each. Blues and yellows are the predominating colors, with reds, greens and oranges. Some are very vivid in coloring and others are soft in tone. Blues, yellows and reds for the colors of a breakfast or afternoon

tea set seem rather startling, but they are not at all barbaric.

This peasant pottery is so unusual and so quaint that it is somewhat difficult to supply the demand for it, now that it is becoming known. The dealers seem not to have discovered it as yet, or else the amount that is made is so limited that the importers do not care to handle it. A few of the studio shops, however, have discovered it, and appreciating its charm, import each year quite a quantity of the pottery. One artist dealer goes each year to Brittany to select his stock, for, like most things, there is a choice to be made. The shapes of some pieces are better than others, and the dealer has confided to me that unless a careful selection is made of the colorings, some of them are rather too vivid.

Besides the plates, cups and saucers and bowls, of which there are plenty to be had, the peasants make such pieces as soup toureens, salad bowls, even an oil and vinegar cruet, salt cellars, egg-cups, cream pitchers and sugar bowls. Amongst the prettiest pieces are the little two-handled porringers which are shown in the illustration. These are made in four or five different sizes. The larger porringers have two little holes in the base of the standard and by passing a wire through to make a loop by which to hang them, they can be arranged in groups of two or three, or more, on the dining room wall. Hung in this way they are very effective.

There are bread and cake plates, some round, some square, and of these there is usually but one design of a kind. Next in size are very large plates, twelve and fourteen inches in diameter. In the absence of platters these can be used nicely.

As useful as these plates may be at the table, I think their decorative value is one of their best features. On china closet or buffet or mantel they add charm hard to be surpassed by other wares.

Probably each piece of pottery costs in Brittany but a few centimes, but by the time the packing express charges and 60 per cent. duty, which is levied on china, is paid, the price is advanced very considerably. However, the small porringers cost from 35 cents to 50 cents each, cups 50 cents, small plates 35 cents to 75 cents, and the larger pieces, such as large plates, salad bowls, etc., \$1.50 to \$2.50 and \$3.00, making the cost not very great for set of dishes which is really unique and never fails to please the guest who has tea or luncheon served to them on china so truly novel. Several of my friends have made wedding presents of small services, and the gift has never failed to please the recipient.

Suggestions to Users of Electricity

FEW users of electricity know the difference between the two systems in general use; also about different voltages. Fan motors, sewing-machine motors, cooking apparatus, etc., made for direct current will not operate on alternating current.

Also the voltage of any piece of apparatus must correspond with that of the system supplying the electricity. If not, a fire may result, or the device be rendered inoperative until repaired. The following example will tell what is the proper way of ordering or determining in case you are offered the loan of any piece of apparatus:

"Alternating current; voltage 110; article, electric sewing-machine motor."

Dangerous results (a costly fire narrowly prevented becoming dangerous) suggested the above hint. Often housewives will lend each other different devices

An Efficient Alarm

A VERY inexpensive and satisfactory device is one that may be placed underneath a rug, mat, or even under the stair carpet and which when stepped on will sound an electric bell at any desired point. They are made by a number of electrical supply companies and make a very satisfactory alarm. If used at night a switch may be placed at any convenient point, and the device rendered inoperative in the daytime by simply turning it. All materials for an ordinary system of this kind can be purchased for about \$1.75, and



The designs are various and admit of a wide choice, but all are on the same general color scheme and decoration, and it is not necessary to have exact designs to harmonize

such as have been mentioned above, without knowledge that what worked on one system of electricity will not work, in fact is very dangerous to attempt to operate, on another. This is especially true when one moves from one town to another. The direct system may have been used where the owner first resided, the alternating in the place he moves to. The voltage may also vary.

an ingenious householder can install it in a very short time with little labor.

This form of alarm is simpler than some of the old types and has the advantage of being in an unlooked for place. Skilled second-story men often have found no difficulty in avoiding the door and window alarms, but this type may be an absolute guard for every floor no matter where the house-breaker effects his entrance.



Garden Suggestions and Queries



Conducted by
F. F. ROCKWELL

The Editor will be glad to answer subscriber's queries pertaining to individual problems connected with the garden and grounds. When a direct personal reply is desired please enclose a self-addressed stamped envelope

September

IT seems quite natural to consider September as the close of the gardening season. A far better way, however, is to think of it as the beginning—the beginning of next summer's plans for grounds and garden. The intermission of winter will make all this year's mistakes and good resolutions fade into the indistinct past, and you will start next year's work and problems from practically the same point as you did this year. Instead of such a happy-go-lucky system, or want of one, you should certainly utilize this year's experiences, and build them into the foundation of the coming season's work. Have you any definite plan for doing so? Or are you trusting to that most fickle of assistants—memory? Why not do as *HOUSE AND GARDEN* has so often urged you, in your own interest, to do: make a sketch of the grounds and jot down improvements you could make?

A Garden Path

For instance, is there not some track across the lawn, leading to a flower bed or a shady spot, where a neat path would look much better than an uneven bare track? Why not put in a narrow gravel path? You can either do the work yourself or supervise some unskilled laborer. There is no need of calling in the assistance of the profession of landscape gardener or florist. First mark it out, with string if a straight path, or if it is to have a graceful bend or two use a number of small stakes, that can be moved in or out at will until you get your curves just right. Cut out the edges evenly with an edger or sod cutter and remove the sod and soil. This, by the way, will be excellent for the compost heap, or for some bed that could be raised a little. The width of the path will depend, of course, on what it is to be used for and its harmonizing with the other features of the place.

Into this excavated path put coarse gravel, coal-ash clinkers or any other very coarse material which you can easily obtain, filling it within about two inches of the top. Tread or pound down very thoroughly and then fill in with small

gravel or screened coal ashes, a little above the surface of the lawn, and well rounded up in the middle. If possible, it will be well to let the lower layer stay awhile and settle before putting on the top one, but the other should be in place, trodden down some time before the ground freezes. The great advantage of making paths and walks in the fall is that they have a chance to work down into a permanent position during late fall and early spring.

Shrubs

This is a good time also to pick out those places on the lawn where shrubs or trees would add to the general effect of the place. Stand on your porch or veranda and in your mind's eye fill in the empty and thin-looking spots. Is there an open vista to the left, terminating in your neighbor's unsightly chicken yard? Can you not imagine the improvement a good thick horse chestnut, or clump of spirea, with its dense mass of graceful sprays, or even a shapely pine or hemlock from the wild woods, would make? Perhaps a few flowering, low-growing shrubs

would break the monotony of trees planted in straight lines, or at regular intervals. Your place is the exception indeed if no improvements suggest themselves to you as you look out across the lawn. Make them this fall. The trees are not expensive, and you can have the nursery man deliver them in proper time for setting in your locality. Many, such as pine, hemlock, spruce, birch, maple, cedar and others, may be had in many sections simply for the trouble of digging them up. It is, of course, more difficult to transplant such trees than those grown in the nursery, where previous transplanting has caused the formation of a dense mass of roots, in place of the long main tap-root which trees dug from the woods usually have. However, with care the uncultivated trees may be brought through; even if some of them die, those remaining will repay the trouble of securing and planting them. Always take up as much earth as possible, cut off cleanly all broken or bruised roots and *firm well when setting out*. If the soil is so dry that water must be used, put it in the bottom of the hole.



A garden path leading to a flower bed or across the lawn where the grass is always tracked down, will add much to your place

Plants of Merit

A plant which, although popular, is not in such universal favor as it should be, is the peony. It is a robust grower, and free from practically all the diseases and insects attacking many other ornamental plants, but it needs a deep rich soil to do its best. If you have plants old enough to divide, attend to it by the 20th of this month. One good strong bud is enough to put in a place. Most sorts will do best when put three to four feet apart. If you are going to set out new plants, perhaps it will be safest to wait until next spring, but get the bed ready now? Make it rich, with manure if you can get it, and plow or spade it up deep and rough on the surface. The old peony bed should be mulched with manure, and if the soil is very dry, kept watered. Remember that the peonies, like many other hardy plants which make a very quick growth in the spring, store up energy and food in the



Geraniums such as these may be had all winter if started from cuttings now

crown of roots a year ahead. You will get returns for any care given now in next spring's beautiful foliage and enormous blooms.

Another flower that is an old popular favorite, but by no means universally seen, is the larkspur. The colors are wonderful. Set plants or sow seed now, or divide your own roots later in the fall when all growth has stopped.

It is also time to sow petunias, phlox, *Drummondii* and other small growing annuals for winter blooming indoors. The secret of starting small seeds at this time of the year is to have the soil thoroughly moistened the day before sowing, and to choose some place that can be sheltered from too much direct hot sun, and heavy rains. A coldframe with finely pulverized and prepared dirt, that can be covered with a sash of protecting cloth, will be as good a place as may be had. The

best plants will be had by transplanting once just as soon as possible, before putting into the boxes and pots for winter blooming.

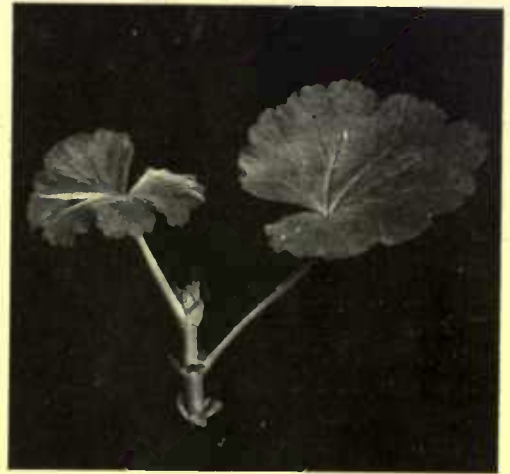
While speaking of sowing seed, do not overlook the possibility of having earlier and better sweet peas than your neighbor's. How? By planting them this fall. Prepare your trench, unless it is on ground that you know is thoroughly drained by a sandy subsoil, by digging out to a depth of twelve to eighteen inches, and put in the bottom coarse coal ashes or gravel. Cover this to within four or five inches of the top with soil that may be made as rich as one-half manure. Do not use fresh manure, which might heat and cause the seed to sprout. The idea is to keep the seed dormant until spring. For this reason the planting should not be done too early, thus allowing the seeds to start and be frozen back. Wait until cold weather is at hand, two or three weeks before you may expect freezing.

The House Plants

A job which should not be put off, is the preparing of your winter plants for blooming and decoration indoors. The ideal way of getting a flowering plant, such as a geranium, ready for winter work is to start it from cuttings or seed, in early summer. Keep them growing on in pots plunged up to the rim in soil, and turned every week or so to keep them from rooting through. They should be re-potted when necessary, and all buds kept pinched off before blooming, so that their full strength may be saved for blooming indoors. Where these preparations have not been made, however, one can still have a supply by getting to work at once. Select a few of the best formed plants, preferably of small size, and if the soil is dry, water thoroughly for several days. Cut them back severely—two-thirds to three-fourths of the new, rapidly made growth. After the cuts have healed over, pot them in good rich porous soil (mix with it swamp or sphagnum moss, leaf-mold or chip-dirt, to one-half its bulk if necessary). Pot them firmly, water thoroughly, and keep in partial shade for a week. From the new growth which will rapidly develop you will get good results. From plants too large and old to bring in, take cuttings. This is the most favorable season of the year for rooting cuttings, and with clean, coarse sand, and carefully selected ripe wood, you ought to get very satisfactory results.

In the Vegetable Garden

Lettuce and radish may still be sown, and spinach, onions and borecole for wintering over. Try also parsnip, carrot, peas, to be planted now, just too late to germinate this season. The seed costs but a few cents, and it's well worth taking the chance, which is by no means too big a one, that they will come through all right, as far north as New York. The advantage of fall sowing is that seeds can begin to grow before the soil is dried out



A typical geranium cutting should be carefully selected for good ripe wood

enough to work in spring; besides which, of course, it relieves the spring rush.

All the onions should be ready for harvesting this month. In very dry seasons, sometimes before September 1. As soon as the tops die down and wither pull them even if small. Later rains, instead of making them larger, will ruin them entirely. Pull and pile up in windrows, three to five rows in each, according to the weight of the crop. They should not be piled up much. Turn with a wooden rake two or three times that they may dry off evenly, and then spread out as thinly as possible under cover, but in an airy place, as they must dry out a good deal more before being stored for winter. This must be done previous to severe freezing.

Keep an eye on the weather to prevent losing your squashes. A few days before frosts are to be expected, cut them with a few inches of vine to each (never break off the stems), and turn over to expose the under side to a few days sunlight, then carry in and pile, being exceedingly careful not to bruise, where they can be covered with bags or mats from the first light frosts; store in a safe dry place as soon as possible, as it takes but little frost to spoil them.



This is the most favorable season of the year for rooting cuttings. Take them from this portion of the branch and trim off the lower leaves



EDITORIAL



THE TURN OF THE ROAD

LIKE a breath of spring on a March day comes a letter to day from a man who has gone back to the land.

"I'm dead broke, but I own a farm. I'd rather be broke *and* own a farm, than not be broke and not own a farm.

"I have been camping in the orchard in a tent and having the most glorious time. I have spent weeks under an old apple tree with a saw and a pruning knife, looking for that 'ideal' that HOUSE AND GARDEN says is the requisite for a successful trimmer and pruner. Bang the editor's head! There isn't any ideal! He is just talkin' hot air. Send him up to me and I'll pound his head and then show him deer that watch me bathe in the morning, a mother partridge shooing her brood from under my feet, the scarlet tanager that greets me from a nearby tree, the baby birds that swing in nests in every other apple tree. I'll show him the miniature brooks and the valleys and the hills of this farm. I'll let him look at a landscape that cannot be beaten. All these things are worth more than 'ideals' anyhow. Why, I don't believe the editor would know an ideal if he met one walking up town."

Probably not, but if we wanted to find one in a hurry, we would take the first train for that farm in the glorious old hills of Vermont.

It is amazing, the widespread extent of this desire to get out of the wearing struggle of city life back to a way of living that agrees so infinitely better with our calm reason. No, it is not amazing, on second thought, for it is such a perfectly natural reaction from the life we have gradually been speeding up to. Looking at the movement—for it is strong enough to warrant that name—in an absolutely disinterested way, it betrays the fact that it is a reaction rather than a logical forward development, in that it is making itself felt almost exclusively about the greater cities. That is to say, there is no reason to believe that we as a people are going to become more of a farming people than we now are. There is too much restlessness, too much nervous energy leavening the mass for that. The distinctly American trait of an abiding lust for power, for influence, for the acquisition of wealth, is too strong to be swept aside by the less blatant attractions of a more contemplative mode of living. All of which is not going to disturb for one moment the serene joy of the man who has decided to make the break and get back to the soil. What does he care about the stock market, the subway problem or the latest restrictions on the building of tenement houses? Other problems are his—the selection of seed corn that will produce a few more kernels to the ear, the diverting of that spring on yonder hillside to feed a new irrigation system, the oiling of that shotgun up on the wall pegs, in preparation for a day after quail. Life with him flows as a slower stream and the cup he quaffs from it is a deeper one. Probably he is never going to accumulate a "fortune," in the accepted meaning of that most elastic term, but the land is going to give him enough and to spare in return for his labor, and his life will be really worth living.

THE POOR MAN'S GARDEN

AN editorial in the New York *Sun* recently complained bitterly that the landscape gardener, in spite of the widespread interest in this work, still seems to be only a luxury for the possessors of great country estates. The point was made that the poor man or the man of moderate means had no such expert to aid him in the task of laying out the garden in accordance with the best ideas along these lines.

In all humility, we venture to say that this is precisely what HOUSE AND GARDEN is trying to do, just as it is trying to show the man of moderate means what is best in architecture and interior decoration, without necessitating too great a cost.

The phenomenon that the *Sun* complains of is not in any sense restricted to landscape architecture, or in the more humble term—gardening. The man who has three to five thousand dollars to spend upon his home, faces the same problem—that of building well and beautifully within his means. In many cases he feels that the services of an architect would add expense without justification, failing to realize the indisputable fact that the few hundred dollars he would pay for the architect's services would be saved twice over in securing proper construction and the effective use of inexpensive materials.

Unfortunately these small problems are not attractive to the architect. His expenses in drawings, writing specifications and supervising the erection of a house costing \$5,000 are practically identical with his expenses in performing the same services in the case of a house costing \$10,000, yet his reward in the second case is double that of the first. This of course is due to the existing system of architects' charges being based upon the percentage of the total cost of the building. The system is not ideal, but the experience of many years has shown that it is the most practical working system thus far devised. Of late years architects have expressed their recognition of the greater cost of time and labor involved in a small house by increasing the percentage rate below \$10,000 or \$7,500. This is only fair, and the results from a practical as well as an esthetic viewpoint are well worth this higher fee.

The case is identical with the gardening and landscape side. People who have not thought deeply in the matter are far too apt to feel that they can readily dispense with the services of the skilled landscape gardener, when the work is not extensive in its scope. Then too, on the face of things the man is apt to think his own knowledge concerning planting is sufficient for all practical purposes on a small place. The only solution of the problem that we can think of is the same for both cases—that the prospective maker of a home investigate the matter fully enough to satisfy himself that the services of both an architect and a landscape gardener are not only advisable, but true economy, and that he be willing therefore to pay the price.

CHEAP SEEDS

IN a nearby grocery store there is a small tray divided into perhaps twenty compartments, each containing packets of seeds lithographed in gay colors. On the under side of the lid, which is hinged and held at a convenient angle with chains, is an inspiring garden scene and the legend, "We can highly recommend these seeds." To our certain knowledge that tray and most of its contents has been in that store for three years, brought forth each spring into a prominent position to tempt amateur gardeners. The packets of peas, beans, lettuce, and so on, bear no seedman's name—a fact that mutely testifies to his business sagacity, for when seeds fail to sprout the amateur gardener has an unerring memory regarding the name the packet bore. When one considers for a moment the relative values of the seed and the labor that go into the making of a garden—not alone the labor of making ready the soil and planting, but the season's work in cultivation, transplanting and fertilizing—it would appear that the very best seed obtainable is none too good on which to base the hazard. If we were casting about for the most common causes of failure in gardening, one of the first to hand would be cheap seeds.

BOBBINK & ATKINS

World's Choicest Nursery and Greenhouse Products

August and September Planting

THE proper way to buy is to see the material growing. We shall gladly give our time and attention to all intending purchasers visiting our Nursery, and invite everybody interested in improving their grounds to visit us. Our Nursery consists of upwards of 300 acres of highly cultivated land, and is planted with a choice selection of Ornamental Nursery Products, placing us in a position to complete plantings and fill orders of any size.

Boxwood. We grow thousands of plants in many shapes and sizes. Everybody loves the aroma of old-fashioned Boxwood.

Bay Trees. Our display of these fascinating trees is larger this season than ever. We are growing many hundreds of perfect specimens.

Decorative Plants. We have 250,000 square feet of greenhouses in which we grow Palms for conservatories, house and exterior decorations.

Hardy Trailing and Climbing Vines. We grow in pots quantities for all kinds of planting.

Plant Tubs and Window Boxes. Ask for special lists.

Hardy Herbaceous Plants. We have

thousands of rare, new and old fashioned kinds. Our Herbaceous grounds are especially interesting at this time. Special prices on quantities.

Evergreens and Conifers. More than 75 acres of our Nursery are planted with handsome specimens. Our plants are worth travelling any distance to see.

Tree Peonies. In all the leading varieties.

Pot-grown Strawberries. Pan American and French Four Season. Ask for special list.

Bulbs and Roots. We import large quantities of Bulbs and Roots from Japan, Holland and other parts of Europe. Our Special Autumn Bulb Catalogue will be mailed upon request.

Our New Giant-Flowering Marsh Mallow. This is the floricultural marvel of the age. Everybody interested in Hardy Old-fashioned Flowers should visit our Nursery and see this wonderful plant now in bloom.

Our Formal Rose Garden. This formal rose garden is now a permanent feature of our nurseries. We claim it to be the only commercial rose garden in the country laid out on so comprehensive a plan and established as a fixture for exhibition purposes. In addition to the Roses in our Formal Rose Garden, we have many thousands in bloom in several hundred varieties. Do not fail to inspect our entire collection while visiting our Nursery.

Our Illustrated General Catalogue No. 40, will tell you about the above and all our other products for Lawns and Gardens.

We plan and plant grounds and gardens everywhere

We Can Make Old Gardens New and New Gardens Old with Our World's Choicest Nursery Products

*Visitors take Erie Railroad to Corlton Hill, second stop on Main Line
Three minutes' walk to Nursery*

BOBBINK & ATKINS

Nurserymen, Florists and Planters

RUTHERFORD, N. J.

Lamps that Beautify

Any room in your house will be enriched in charm and beauty when lighted with a Handel Lamp. The soft, mellow light shows every detail of the furnishings to the best possible advantage.

Handel Lamps and Fixtures are expressions of the highest artistic skill and originality. The form and proportion are faultless and the color harmony is perfect.

The reading lamp here illustrated is style No. 5357; it is made for electricity, gas or oil. Base is hand-wrought cast metal, handsomely finished. The shade is a beautiful design in blown glass Teroma, made by our cameo etching process which gives an exquisite blending of colors and produces a soft, rich radiance.

Handel Lamps

and Fixtures are sold by leading jewelers and lighting fixture dealers. We will gladly tell you the name of the nearest Handel dealer and we will assist you to select a lamp especially suited to your requirements.

Our booklet, "Suggestions for Good Lighting," shows many interesting possibilities in artistic lighting effects. It also illustrates the leading styles of Handel Lamps and Fixtures.

*Sent upon request
to anyone interested.*

The Handel Company

390 EAST MAIN STREET
MERIDEN, :: :: CONN.

New York Show Rooms
64 Murray Street



You Need This Book to Help You Decorate

Are you planning a new home, or about to decorate your present one? Then this book,

"Decorative Interior Finishing,"

will be of great assistance in suggesting color schemes and in advising as to the best way to finish your woodwork. It's free.

Send For It

It tells, also, about the many

PRATT & LAMBERT VARNISHES

We make over 300 kinds, so that every condition that your finishing requires will be fully met by a varnish made especially for that condition. Behind each varnish is an experience of 62 years making varnishes the best they can be made.

If you would guarantee to yourself lasting satisfaction, see that the varnish your architect specifies or painter uses bears the Pratt & Lambert label and that it is the kind we make especially for the purpose you have in mind.

Vitralite

The Long-Life WHITE ENAMEL

will enable you to secure the purest permanent white effects. It never discolors, cracks nor chips. Flows easily and dries hard and smooth, without a trace of brush mark or lap. That is why it is so easy for anyone to apply it successfully. It is proof against weather conditions, and is unexcelled for interior or exterior work on wood, plaster or metal. Your bathroom, kitchen and at least one bedroom should be finished with Vitralite. Vitralite enamels white—makes rooms cheerful and bright.

Sample Panel and Vitralite Booklet Sent Free

The question of floor finish is settled by "61" Floor Varnish, the one varnish made especially to withstand the hard usage all floors receive. "61" is mar-proof, water-proof, heel-proof.

Send for Free Sample Panel finished with "61"

Stamp on it and prove you may dent the wood but the varnish won't crack. You'll find our free book, "The Finished Floor," valuable. Send for it.

If your dealer cannot give you the "P & L" Varnish you want, send direct to us at 117 Tonawanda Street, Buffalo, New York

"61"

In Canada, 61 Courtwright Street,
Bridgeburg, Ontario

FLOOR VARNISH

PRATT & LAMBERT VARNISHES

AMERICAN FACTORIES ESTABLISHED 62 YEARS FOREIGN FACTORIES
BIRMINGHAM, CANADA LONDON, PARIS HAMBURG



Asbestos "Century" Shingle Roof—Residence of George Jacka, Calumet, Michigan.

ASBESTOS "CENTURY" SHINGLES

"The Roof that Outlives the Building"

EVERY cent you put into an Asbestos "Century" Shingle roof buys wear and service—protection against fire and weather—insurance against bills for repairs and painting.

You can't say as much for any other roofing on the market.

Asbestos "Century" Shingles are practical, *lightweight* shingles of reinforced concrete—made of hydraulic cement reinforced with interlacing asbestos fibers.

They are absolutely indestructible by weather and time. Fire cannot burn them, melt, chip or flake them. Their first cost is about what you would expect to pay for a first-class

roofing—and *there's the end of the expense.*

No repairs—no painting.

You can get Asbestos "Century" Shingles in three colors—Newport Gray (silver gray) Slate (blue black) and Indian Red—in numerous shapes and sizes. Write for booklet "Points on Roofing."

The Keasbey & Mattison Company

Factors

Ambler, Penna.

Branch Offices in Principal Cities of the United States,
and London, England.

New Ways of Controlling Electricity in the Home.

(Continued from page 155)

cellar light or lights. While the cellar lights are burning the red light in the kitchen burns, serving as a reminder. The red light should be set where it will directly confront the person who mounts the cellar stairs. The cellar light that is controlled from the kitchen is the only worthwhile light, for it need not be turned out downstairs while you grope your way up in the dark, nor need a streak of candle grease bear testimony to the use of a light in the hand.

An adaptation of the door-hinge idea has been worked out by an out-of-town house owner. His place is surrounded by a fence with a gate. When he opens the gate on his arrival at night, the switch set at its hinge turns on the light on the piazza, enabling him to plainly see his way. This light may be turned off at the house when desired; but the approach of a caller, or anyone who opens the gate, will serve to turn on a welcoming light. In the case of a tramp or other undesirable, the magic light will probably serve as a watch-dog and repel rather than invite advance.

This convenience could we well adapted to city houses where on opening the area gateway one is confronted by abysmal darkness. Suppose the opening of the gate turns on a light in the areaway; it would serve not only as a help to the newcomer, but would enable the person who opens the door to see what manner of man desires admittance. Lights of this sort would also be a valuable aid to the police.

Nowadays a large public building not equipped with electric fire signals is an anomaly. For private house use these annunciators have not had sufficient attention. The country house should be provided with an annunciator connected with the stable, with an outside gong to summon neighborly help, with the fire department, or at least with a loud gong to warn all the inmates. These annunciators require the breaking of their glass covering with sharp blows, which breakage releases the spring controlling the connections.

The instantaneous electric hot water supply for the bath room, kitchen or laundry is a newly perfected apparatus which will supply hot water in small or large quantities as desired. The most improved connection provides for the passage of electric current through cold water, the water being automatically turned into the heater as the electricity is turned on. This provides against overheating the carbon rods before the water comes in contact with them, doing away entirely with the danger of steam explosion.

The man-of-the-house need not growl over lack of warm water and good light for shaving, if his house be wired for electricity. A portable shaving glass arranged with a movable shade and diffused electric light underneath, throws a good light upon the face, without shadows. A

Plant for Immediate Effect Not for Future Generations

Start with the largest stock that can be secured. It takes over twenty years to grow such Trees and Shrubs as we offer.

We do the long waiting—thus enabling you to secure Trees and Shrubs that give an immediate effect. Price List Now Ready.

ANDORRA NURSERIES Box CHESTNUT HILL,
H. PHILADELPHIA, PA.

WM. WARNER HARPER, Proprietor

wall mirror could be made to serve the same purpose with small stationary lights around it, half shaded so that no shadows fall upon the face. The electric shaving-mug holds a half pint of water quickly heated from the device at the bottom of the cup when attached to any incandescent bulb socket.

That the hot water bottle is to be relegated to the past, and to those not progressive enough to use electricity, is demonstrated by the electric warming pad—a thick pad apparently made of eider-down flannel. The heating element is concealed in the center; and when attached to a socket one has all the delight of a hot-water bag with the knowledge that it will retain its heat indefinitely. The warming pad is also usable with a small storage battery for carriage, sleigh or car travel, and for use where a house is not wired.

The portable electric lighter has many uses. In a home where gas is used for illuminating and for cooking, this lighter, attached to a common dry battery, is guaranteed to furnish thousands of lights at less than the cost of a box of matches. It may be used for anything that requires a light—lamps, cigars, fires—and its safety is assured.

The various electric culinary helps now flooding the stores are enough to make our great-grandmothers turn in their graves. Think of cooking one's whole breakfast, including griddle cakes, on the table, without the aid of a match, but with an electric coffee-pot, and an electric griddle and toaster, hot at a moment's notice. Think of the sick-room convenience in heating food on the spot. Think of doing one's washing and ironing by electricity. Think of cleaning one's curtains, chairs, pictures, woodwork, mattresses, carpets, floors by a simple electric suction process. And all this in addition to general water and heat supply secured by electric motor.

A general utility motor is now installed as part of the paraphernalia of progressive housewives. These small motors are used for running the sewing machine, polishing brass and silver, chopping, washing, and freezing ice cream. The friction will burnish brass and silver without paste or polish.

Surely the question of domestic service is fast reaching its solution in the genii of electricity.

In installing electric connections it pays to see that most careful insulation is made. Economy in electric installment is like economy in plumbing—a saving at the spigot to spend at the bung.



Three Lilly Pools

(Continued from page 157)

garden, and then the barrels were filled with water.

The pool was at one corner of the garden, with a background of shrubs and lilacs. Water lilies—one the *Odorata*

It is now
customary at afternoon
teas and luncheons to serve

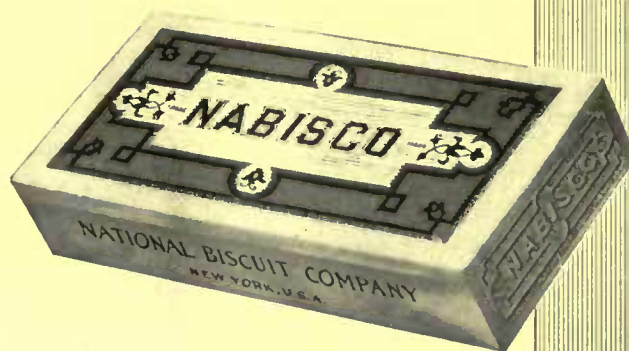
NABISCO Sugar Wafers

as the crowning touch—with
tea or chocolate.

In ten cent tins

Also in twenty-five cent tins

**NATIONAL
BISCUIT COMPANY**



DURABLE AND ARTISTIC ROOFING



Residence of W. T. Phillips, San Mateo, Cal.
Covered with Meurer's Metal Tile

Meurer's Metal, Spanish and Mission Tiles

The Ideal Roof Covering
made in tin, galvanized and copper

MEURER BROTHERS CO.
MANUFACTURERS

575 Flushing Ave. Brooklyn, N. Y.
WORKS, Washington, Penn.
130 East 129th St., New York City



Little Things Tell

The hardware on your home tells of good quality and thoroughness or of poor construction and lack of judgment. If it looks badly or fails to work properly, it is a source of annoyance so long as the house stands, but if it is right, it is a cause of constant satisfaction.

The Oakland knob and escutcheon shown are especially suited for Colonial, Craftsman and Mission homes. It is one of the 123 Corbin designs in 19 schools and made in 54 finishes, found upon homes of refinement everywhere. The best dealer in your city sells it.

Send for publications.

OK 16, Corbin Wrought Hardware
OK 17, Corbin Colonial Hardware
OK 53, Corbin Princeton Design
OK 80, Corbin Specialties

P. & F. CORBIN
NEW BRITAIN, CONNECTICUT

P. & F. Corbin
of New York

P. & F. Corbin
Philadelphia

P. & F. Corbin
of Chicago



minor, a fragrant variety—and hyacinths were planted in the barrels. Bordering the pool were the Spanish iris, which grow very low. Around the barrels were the larger German iris, and at the back, the tall Japanese iris. Planted freely among the iris were different kinds of ferns—the Beech, the Royal and the Ostrich ferns. A privet hedge formed the outer circle of the pool. Carpeting the front of the pool was a border of English ivy and poet's narcissus.

This planting is most effective. It is also hardy, with the exception of the English ivy, which must be heavily covered with leaves in the fall.

In front of the pool was a rustic seat, on which was carved: NYMPHÆA NYMPHÆARUM, Nymph of the Nymphs. At each end of the seat bloomed a little rose tree, although this could be replaced by a bay tree if one prefers.

Even with two lily pools the woman was not content and she now has a city garden, the most attractive spot of which is the lily pool. This pool, made of Portland cement, is much more formal than the others. There is a drain in the center and the plants can be left in the pool during the winter, but should be covered with leaves and straw.

At each corner of the pool is a little box tree in a cement pot. Around the outer edge of the pool is planted English ivy and periwinkle, with its little blue flowers. These come early in the spring and when they are gone the vines form a thick growth of glossy green throughout the season.

At one side of the pool is a cement seat with the following inscription:

I will let no music enter
Saving what the Zephyr sings,
Which the lilies in the basin
May seem pure enough to hear.

The "Lady of the Pools" insists it is impossible for her to tell which one she loves best. Each has had its individual appeal. But she always speaks caressingly of the one in the swamp with the towering cat tails and the wonderful frogs.



The Prophet's Chamber

(Continued from page 162)

brush, comb, etc. On the top of the table was a century old brass candlestick holding a plain white candle as nearly like the old dipped ones as could be found. By it were antique snuffers, similar to those in use in the days of the prophet. A Bible, in harmony with the tone and intent of the room, was also kept on the table. The sloping walls were covered with a simple paper of nodding golden-rod. The only ornament was a small but ancient print of a Biblical subject.



Studabaker Warerooms, New York, N. Y.

All Cement Floors Need Dexter Brothers

Petrifax Cement Coating

There is bound to be more or less powdering. The dust is not only annoying, but is injurious to the throat and lungs. Two coats of Petrifax make a sure and lasting remedy. Gives a hard surface that will not crack or peel. Washable, and prevents spotting from oil or grease. Especially adapted to use in garages, factories, hospitals, gymnasiums and public buildings. No. 40 Petrifax is the exact color of cement. Also made in white and several shades. Write for interesting booklet.

Dexter Brothers Co., 113 Broad St., Boston, Mass.

1133 Broadway, New York, 218 Race St., Philadelphia, Pa.

Makers of Dexter Brothers English Shingle Stains

AGENTS: H. M. Hooker Co., Chicago; E. B. Totten, Security Bldg., St. Louis; Sherman Kimball, San Francisco, Cal.; Hoffschlager & Co., Honolulu, AND DEALERS.



Be sure
the word
PETRIFAX
and our
name
are on
every
barrel,
keg and
can.



It will be seen that such a room is quite within the reach of every one. Its simplicity is in keeping with summer homes, bungalows or shacks. Indeed, the more elemental the features the more like the traditional chamber on the wall. If such a room is made in a pretentious house, it must be treated with care. Eliminate everything but the stipulated furnishings. Otherwise it will be too much like any other and not a character room as it should be. The writer would suggest the use of plain paper in some quiet tone rather than a flowered one, such as was used in the particular room photographed.

There are three elements to be distinctly borne in mind in the development of this chamber: first, it should be simple; second, its furnishings should be antique; and third, it should breathe a gracious aid of hospitality. The modern guest, like the prophet of old, will be glad to rest there a little as the busy world goes by.



A Revolutionary Idea in Flooring

(Continued from page 167)

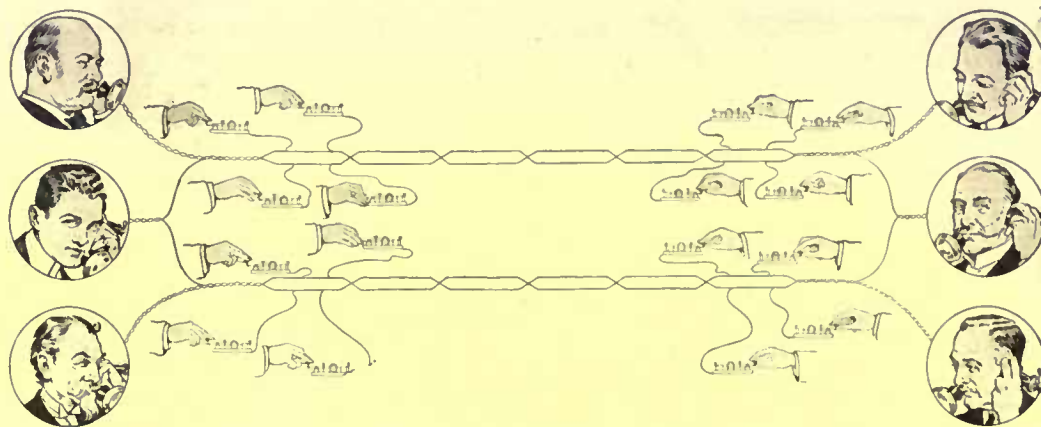
ished off looks very well. The small defects are obscured by the filler and you have an inexpensive floor that you need not be ashamed of.

When it comes to the more artistic effects in flooring, in the thin floors laid on top of sub-floors there is a chance for the exercise of common sense and the getting of good effects without going to the extremes that are often talked of in the papers. There are generally three grades of the oak flooring stock and two divisions aside from these, quartered and plain. It is generally better in this work to buy the quartered oak, for though it costs a little more it works with less waste and presents so much better figure and gives so much more satisfaction generally that it is well worth the difference in price.

The three grades in quartered oak may be popularly named as follows: clear stock; selects, which have a few defects of beauty, but nothing marring the usefulness of timber; and saps, or a grade lower than the selects, including a few fine worm holes and quite a lot of sap stock, which is not admissible in the clears.

The writer was in a newly finished display room of a flooring plant the other day where they had laid many examples of their flooring to show them off to visitors, and among the lot were some examples of that third grade or "saps" and until attention was called to it not much difference was noticeable between it and the other except that it seemed to have been filled with a darker filler.

Now, it so happens that the dark fillers are quite the style to-day and one can take this third grade or "saps" in thin flooring, lay it in whatever pattern is desired either with border or with stripes or rug effect or pave it in with blocks and



Double Tracking The Bell Highway

Two of the greatest factors in modern civilization—the telephone and telegraph—now work hand in hand. Heretofore each was a separate and distinct system and transmitted the spoken or written messages of the nation with no little degree of efficiency. Co-operation has greatly increased this efficiency.

The simple diagram above strikingly illustrates one of the mechanical advantages of co-operation. It shows that six persons can now talk over two pairs of wires *at the same time* that eight telegraph operators send eight telegrams *over the same wires*. With such joint use of equipment there is economy; without it, waste.

While there is this joint use of trunk line plant by both companies, the telephone and telegraph services are distinct and

different. The telephone system furnishes a circuit and lets you do your own talking. It furnishes a highway of communication. The telegraph company, on the other hand, receives your message and then transmits and delivers it without your further attention.

The telegraph excels in carrying the big load of correspondence between distant centers of population; the telephone connects individuals, so that men, women and children can carry on direct conversations.

Already the co-operation of the Western Union and the Bell Systems has resulted in better and more economical public service. Further improvements and economies are expected, until time and distance are annihilated by the universal use of electrical transmission for written or personal communication.



AMERICAN TELEPHONE AND TELEGRAPH COMPANY AND ASSOCIATED COMPANIES

One Policy

One System

Universal Service

ANDIRONS FOR EVERY ENVIRONMENT

Your home should have an atmosphere of comfort and refinement. A cheerful fireplace with proper accessories will do more to give a room character than anything else.

Graf Fireplace Fixtures give a fireplace interest. They are made in a wide variety.

Be the prevailing note of your room Colonial, Dutch, French, Mission, or of any other type or period, we can supply the proper fixtures.

Write for our illustrated booklet "Fireplace Fixtures." It shows Andirons, fenders, seat fenders, smokeless gas logs, wood boxes, etc.

Write us NOW. Our book "Fireplace Fixtures" is FREE.

FRANK H. GRAF MANUFACTURING CO.
323 Seventh Ave. New York City

SILVER LAKE A Sash Cord

(Name stamped indelibly on every foot)

The man who builds a house without asking about the sash-cord to be used is laying up trouble for himself. Insist that the specifications mention SILVER LAKE A. Its smooth surface offers nothing on which the pulley can catch. Guaranteed for Twenty years.

Write for Free Booklet.

SILVER LAKE COMPANY

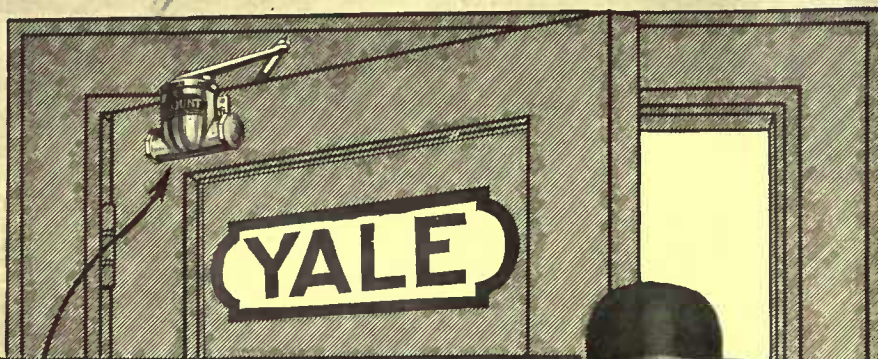
87 Chauncey St.,

Boston, Mass.

Makers of SILVER LAKE solid braided clothes lines.



The BLOUNT is my friend



It always shuts the door

You are *safe* when you specify any Yale product.

Yale and Blount Door Checks come in several sizes, and fitted for all sizes, weights and openings of doors,—single acting or double swing.

Then there is the Yale "Holder" Check (which keeps doors open when you wish) and the Floor Check (for double acting doors) that is applied under the flooring.

Furnished in "finishes" to harmonize with your other hardware.

Every Blount or Yale Door Check is of the famous *Yale Quality*.

Send for Illustrated Book-let with full specifications.

The Yale & Towne Mfg. Co.

The Makers of Yale Products

9 Murray Street, New York, U. S. A.

Chicago, Boston, San Francisco,
London, Paris, Hamburg



then fill it with a filler stained pretty dark. It takes out the contrasting colors or rather tones them down so that the whole floor blends together in a nice effect and after being finished off no one but a close student of such things would notice the difference between this and the highly expensive clear stock in quartered flooring.

One could go on and talk enough to fill a volume about this matter of sound sense in flooring, but after all the secret of it is contained in the one idea, that of using narrow units. No matter where you are located or what kind of material there is at hand to use for flooring, if you can get it in narrow units, preferably not wider than $1\frac{1}{2}$ inch net, you can make a floor out of it and a floor that will give service and look neat even though you may use a comparatively low grade of lumber. Indeed, much of this narrow flooring is made of low grade lumber ripped into strips and the conspicuous defects cut out. It makes an excellent floor, too. One that even when laid plain just as a single floor is good enough for every day and Sunday, too. It can be finished off with varnish and waxed for the parlor or finished off with a special varnish and stand the hard service of the kitchen.



Storing Vegetables and Fruit

(Continued from page 163)

ground, cure during the warm days of September, but must be covered when a clear cold breezeless night invites frost. These vegetables are ready for storing when the stems are shriveled and free from moisture and the rind somewhat hardened. Only a dry air will keep these vegetables in a room where the temperature does not get below 40 degrees.

All tubers must be at least surface dry before storing, with the exception of sweet potatoes, which are most exacting as to care. They must be dug before frost and subjected to a slow drying out in small slatted baskets or crates in a warm room. Carrots, beets, turnips, parsnips and such vegetables cannot be dried and stored satisfactorily as are sweet potatoes, as they lose so much by shrinkage. They are best if stored where they may get the slight moisture of soil contact. Fine, clean sand on the floor of a cool cellar is the best substitute for natural conditions. A layer of sand about two inches deep is spread upon the floor, the vegetables laid thereon and then covered with more sand.

Onions, beans, peas and peppers require a dry room well above freezing after a preliminary sun-drying.

Cabbage keeps crisp and fine-flavored under a mound of earth.

A little detail well worth attending to now in advance is getting a few barrels. They always advance in price as the apple picking season comes on, and frequently one cannot get them for love or money.



GARDEN TERRA COTTA

*Jar
for Autumn
Wild Flowers*

Send for Catalogue of Garden Furniture, Vases, Flower Pots, Etc., made in strong and durable Terra Cotta.

**Galloway
Terra Cotta Co.**

3214 Walnut St., Phila.

Interior Decoration

Interior decorations of all descriptions planned and executed. Single rooms or whole houses furnished, and wall coverings, hangings, rugs, furniture, etc., selected to suit any scheme. Out of town orders carefully attended to. Lamp and candle shades. Stenciling.

MISS THROOP—MISS VEERHOFF
37 EAST 60th STREET :: NEW YORK

What Type of Heating?

(Continued from page 168)

would otherwise be possible, and as I mentioned before, this saves coal and labor. In addition, a large enough heater allows you to put in an additional radiator if you enlarge your house, and also enables you always to warm your home even in bitter cold weather without auxiliary means of heat, which are often expensive and troublesome to maintain.

Whatever heat you use, whether it be hot water, steam, or hot air, be sure to figure carefully the size necessary to properly heat your home without forcing the heater. In addition to what I have mentioned about the excessive amount of coal which is burned when the furnace fire is forced, there is another serious objection to doing so, and that is that the iron heating surface of the furnace will be injured so that it will not readily absorb the heat of the fire. Take the ordinary range lid for example. People frequently complain that they can heat their stove lids red hot and yet cannot obtain sufficient heat to cook properly. Of course they cannot; the iron has been overheated and has been ruined for the purpose for which it was intended. It is a serious and costly matter to ruin a furnace in this manner. Better by far pay the slight additional cost of a large enough heater in the beginning.

THE INDIRECT SYSTEM

There is still the indirect system to be considered. For the benefit of those who do not know this, I will say that in the "direct" the radiators are placed in the rooms they are to heat, while in the "indirect" fresh air is obtained from outside and heated by the means of an enclosed coil of pipes or radiator; the warm air then passes through a tin pipe to the room it is to heat as in a hot air system. This method gives a very pleasant supply of warm air, but it is more expensive to operate, requiring seventy-five per cent. larger furnace and seventy-five per cent. more heating surface in the radiators than a hot water heater; and fifty per cent. larger boiler, and fifty per cent. more heating surface in the radiators with steam. This system also involves a far greater amount of attention than the direct, for if constant heat is not maintained in the coils or radiators cold air will enter the rooms unless the supply of air from the outside is shut off. I have known houses where a combination of the direct and indirect was used, the direct for the bedrooms and halls, and the indirect for the rooms most occupied by a number of persons at one time, such as the living room, parlor, dining-room, etc., but even in these houses where there was a man constantly employed about the place who could give a part of his time to attending to the heating apparatus, the indirect part was not satisfactory because of the amount of attention it required to maintain an even degree of temperature. It was found best to substitute the direct for it, and to obtain fresh air by ventilators in the windows, or



**CRYSTAL
Domino
SUGAR**

One of the
Quality Products
of
THE AMERICAN SUGAR
REFINING CO.

The ONLY HARDY PURE WHITE LILY IS
Lil. Candidum
THE MADONNA LILY

This Lily must be planted in SEPTEMBER, to bloom gloriously in June and July. The bulb makes in fall a growth of a rosette of leaves, but frost does not hurt it. EXTREMELY hardy. Multiplies season after season.

	Each	12	100
Lil. Candidum large, including delivery	.10	\$1.00	\$7.50
Monster bulbs, including delivery	.15	1.65	10.00
JUMBO bulbs, 12-20 flowers to stem, including delivery	.25	2.50	12.00

Plant **PAEONIES** in September

We have a LARGE collection of the RAREST SINGLE, semi-double and double sorts from JAPAN and EUROPE. Send for our FALL CATALOGUE giving full information on Bulbs of all kinds for House and Garden culture. French, Dutch, Japan. NOVELTIES in every line.

H. H. Berger & Co., 70 Warren St., New York

GOING TO BUILD? READ THIS!



FROM NO. 3 BOOK
You will find in our books just the design you are looking for. **ALL PRACTICAL and ESTIMATES ACCURATE**

OUR BOOKS

No.	Designs	Costing	Price
No. 1.	25 designs of residences	costing \$1,500 to \$5,000	50c
No. 2.	25 designs of residences	costing \$5,000 to \$20,000	50c
No. 3.	25 designs of up-to-date concrete residences,	costing \$2,000 to \$22,000	50c

All three books at \$1.25. Plans furnished at popular prices. We submit sketches on request for any type of building. Books sent prepaid on receipt of price.

ARTHUR G. LINDLEY CO., Architects, SCHENECTADY, N. Y.
15 Years' Practical Experience. References.



ARE you penny wise and pound foolish? Would you use a cheap quality of varnish, stain or enamel in the interior of your new house? This would prove expensive economy.

An inexpensive wood may be successfully used for the trim of the house, but the stain, varnish or enamel should be of the best that is made.

The quality of the materials manufactured by Murphy Varnish Company is unsurpassed, the price puts them within the reach of all wise home makers.

YOU may be interested to know that as a customer of Murphy Varnish Company you are entitled to the service of their Department of Decoration without any charge whatever. This includes expert advice on the treatment of the standing woodwork. Sample panels showing the finishes recommended are sent upon request, also complete advice on the decoration and furnishing of your house. Samples, cuts and prices of all goods are supplied. You will find the suggestions artistic and practical.

Write today and send your floor plans.

Address Department of Decoration

Murphy Varnish Company

345 Fifth Avenue New York

Landscape Gardening



Prof. Craig

A course for Homemakers and Gardeners taught by Prof. Craig and Prof. Batchelor, of Cornell University.

Gardeners who understand up-to-date methods and practice are in demand for the best positions.

A knowledge of Landscape Gardening is indispensable to those who would have the pleasantest homes.

250 page Catalog free. Write to-day.

THE HOME CORRESPONDENCE SCHOOL
Dept. 226, Springfield, Mass.

even by opening the windows themselves when necessary. In the average country home one finds a constant supply of fresh air entering around the doors and windows, so the direct seems all that should be required, especially if the rooms are thoroughly aired at intervals. In city residences in some cases this is not so, as it is more difficult to obtain ventilation in houses built closely together; and a well constructed hot air furnace may then be used to advantage, if you do not care to install the indirect system to obtain a plentiful supply of fresh air. The indirect is frequently used for heating churches or public buildings where many people gather together at one time, and where much ventilation cannot be secured while they are present because of the danger of putting them in a draft. Steam is usually used for the indirect heat in such buildings and answers admirably because a steady constant heat is not required; only a large amount for short periods of time, and as there is a janitor or sexton to look after the fire when the heat is needed, there is no difficulty with the cold air supply from outside. But in most private residences conditions are entirely different, and a constant supply of heat at an even degree of temperature is what is required.

EXPENSE

This is a much debated subject, but the writer has found that hot water does burn less coal. Of course now we are speaking of the direct methods. Steam he would place next, and hot air last. Over against this conclusion we must place the fact that the cost of installation and equipment varies in just the reverse order—hot air least and hot water the most expensive.



The Houses of Wood or Brick

From the Address of W. E. Dunwoody, at the Dealers' Convention, Macon, Ga.

ON account of the fact that lumber is daily becoming scarcer and more expensive, and the consequent comparative cost of a house of brick and one of cement or wood is a daily problem, the Building Brick Association of America recently undertook to determine something definite regarding this matter, and I give the results of this investigation for your consideration.

For this purpose, a modern eight-room frame house of good design was chosen, and plans and specifications were prepared by a well-known and competent firm of architects. These plans and specifications were submitted to five well-known contractors, and each fully advised of the object of the investigation.

Each contractor was given the same information and instructions, and each took plenty of time to figure with care, with the following results:

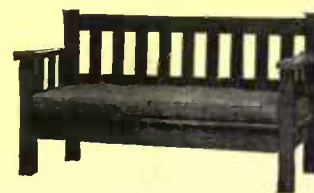
Taking a weather-boarded house as a standard, they found that a house complete

"LEAVENS MADE" FURNITURE



Q Makes its strongest appeal to people of taste and refinement. A large business of supplying the purchaser direct has been built upon the simple, artistic lines of our designs, solid construction, and a variety of custom finishes, meeting every possible requirement of discriminating people.

Q A large assortment of Furniture in the natural wood or stained to suit the individual taste. Your choice of any of several finishes to harmonize with the color scheme of your rooms.



Q Send for full set of illustrations, mailed upon request.

WM. LEAVENS & CO.

Manufacturers

32 CANAL STREET, BOSTON, MASS.

Better Lawns, Flowers and Vegetables with Wizard Brand Pulverized Sheep Manure

Wonderful results quickly. No weeds or foreign grasses. Economical and convenient to use. Unequalled for lawn, flowers, trees, shrubs, fruit, meadows and grain fields. per bbl. freight prepaid east of Missouri River. Cash with order. Ask for quantity prices. Write for copy of booklet "Lawn and Garden." Gives valuable pointers.

THE PULVERIZED MANURE COMPANY
25 Union Stock Yards Chicago
Wizard Brand is handled by first class seedsmen



with the outside walls of brick ten inches thick would cost an advance of 6.5 per cent. over the weather-boarded house; that a house with twelve-inch brick walls would cost an advance of 10.7 per cent. over the weather-boarded house; that a house of stucco on hollow clay blocks would cost 4.9 per cent. in advance of the weather-boarded house; that a house of stucco on frame would cost in advance of 2.5 per cent. over the weather-boarded house; and that a house with four-inch brick veneer on hollow clay blocks would cost an advance of 7.7 per cent. over the weather-boarded house.

In these estimates face brick were figured to cost \$17.50 per thousand, and common brick \$9.00 per thousand.



A Bulb that will Prolong the Fall Garden

(Continued from page 171)

shown some rather peculiar characteristics. The blossoms usually appear rather late; the first ones are always pinkish-lavender in color; after a while flowers are produced which show some white petals, perhaps half of the blossom being white and the remainder lavender. At the last, perfectly pure white blossoms appear. This is usually in November. Whether the cold weather has an effect on the color of the blossoms is an unsettled question in the mind of the owner of the garden, but these characteristic features have been shown by the plant every season for several years.

One has but to see a mass of these pretty flowers blooming late in the fall in the garden, or scattered around in the grass, to be convinced of their desirability, and once introduced, no flower lover will be willing to have them banished from his domain.



A Combination Hotbed and Storage Pit

(Continued from page 172)

close intervals to stuff, spiked at sides, two inches from edge to top, the post being sawed at a slant, as shown in fig. 2, to allow the sash to slide over for ventilation, watering, etc. At proper intervals on this rail small blocks are nailed to fit snugly on each side of the rafter ends.

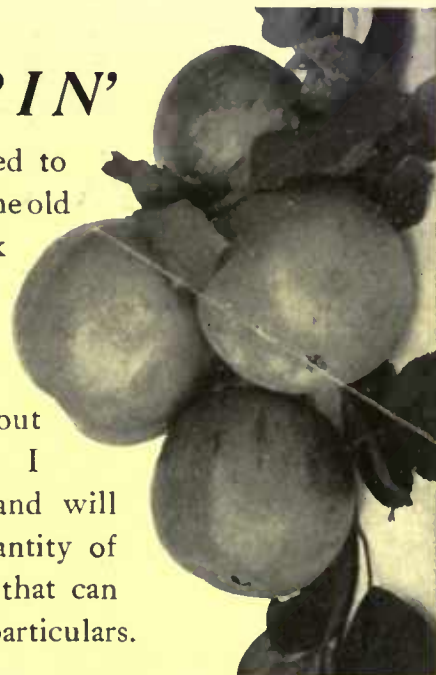
The sash guide strip, S. G., in fig 5, is of white pine, one inch square. To prevent after-swelling and binding these strips should be thoroughly saturated with linseed oil and two coats of white paint given before attaching to rafters, R.

The rafters and ridgepole are of 2 x 4 in. material. The ridgepole is made up of two pieces, L.R.P. and T.R.P., spiked together. The top piece, T.R.P., as shown

HAVE YOU A HANKERIN'

for those firm, sweet apples you used to knock off the tree with a club when the old man wasn't looking? That was back in the days when the East—the natural apple country—was producing bumper crops. It was before the days of Oregon apples that have size and color, but lack the real flavor of Eastern hillsides. I have rejuvenated a Vermont orchard and will have for October delivery a limited quantity of apples that are just a little the best that can be grown. Drop me a card for the particulars.

JULIAN A. DIMOCK, East Corinth, Vermont



TOPSHAM QUALITY
FANCY VERMONT APPLES



WHEN AN ARCHITECT

Builds his own home he wants the best of everything. MR. ERNEST GUILBERT, City Architect of Newark, N. J., began right by making all his window casements swinging out.

Then he equipped them with our famous "BULL-DOG" ADJUSTERS in solid Brass to last a lifetime. Neat, strong and simple, and operated easily from INSIDE THE SCREEN with one hand.

Our free booklet tells all about casements.

CASEMENT H'D'W'. CO., 175 N. State Street, Chicago

Purchase Your Peonies from TRUE Peony Specialists

We are the only extensive retail growers of Peonies exclusively in America. This one flower has our undivided time and attention, devotion and study. We are thus Peony specialists in a sense which possesses a real value and significance.

WE GROW PEONIES —NOTHING ELSE

No perplexing and endless lists of varieties to puzzle over. We have done the eliminating—the sorting and sifting. We offer the best sorts in existence and **ONLY** the best—guaranteed true to name—and as we grow for discriminating customers, we supply only established plants at the lowest possible prices for quality.

"OUR REPUTATION HAS BEEN BUILT ON THE QUALITY OF OUR STOCK"

WE SHIP ONLY IN THE FALL, AND OUR ANNUAL CATALOG IS NOW READY. IT'S UNIQUE—DISTINCTIVE—VERY DIFFERENT FROM OTHERS. MAY WE SEND YOU A COPY?

MOHICAN PEONY GARDENS, ^{BOX 25} Sinking Springs, Penn'a

HAVE MUNSON-WHITAKER CO ADVISE ON YOUR WOODLANDS

ADVISE on how they can be made a highly interesting, valuable part of your property. In general, woodlands are wastelands as far as the pleasure the owner derives from them is concerned. But this need not be! To the skilled forester they hold large possibilities. He knows how to convert them into one of the most interesting "walk-throughable," pleasure-giving parts of your grounds.

It is of just this and more, that we want to advise with you concerning your woodlands. Forestry and the care of trees in all its branches is our business. We have just published a most convincing booklet on woodlands showing the "before" and "after" results of our work. Send for it. Or send for us.



BEFORE

You never see woodlands of this sort in England or Germany. As far as its usefulness or accessibility is concerned, it might just as well be a swamp. It requires more than mere clearing out—it needs the scientific work of both preservation and elimination, that our foresters can give.



AFTER

Last fall we were engaged to reclaim this woodland. In the spring, when the owner came back from Florida, this was the happy change that greeted him. It is now available ground—beautiful ground. It is growing better trees, which each year add to both its interest and value.



Munson-Whitaker Company FORESTERS

Boston—623 Tremont Bldg. New York—823 Fourth Ave. Bldg.
Pittsburg—743 Oliver Bldg.

in fig 4, is notched in, as at R.N., to hold upper ends of rafters. The rafters are held together, as shown in figs. 3 and 4, by bent pieces of heavy wire, as indicated by B.W., the upper ends of S.G. being cut away to allow inserting of binding wire into rafters.

A ridge board, R.B., in fig. 6, is necessary to prevent wind getting under sash ends and lifting sash. This board is made of one-inch fence stock, nailed together trough-shaped and held in place by a third board, attached as at R.B.S., notched to fit over wire and rest on ridgepole.

The length of center post will depend on depth of pit and thickness of support, C.P.B., which is necessary to prevent settling. In setting up, the ridgepole is lightly toe-nailed to center post and rafters laid on at intervals to steady ridge, which must be absolutely level. The rafters are not nailed at either end, it being the purpose to make the skeleton or frame of this bed portable and easily removable. The center posts may be placed ten feet apart for supporting sash, but an extra post should be placed between to support the extra weight of earth and covering when used as a storage pit.

The ends are built on a separate form or frame and attached to end posts by heavy hooks instead of spikes, to permit removal. A vertical sliding door is placed in one side of this end to permit easy entrance to frame when used as a storage pit without disturbing the protecting banking of litter.

Fresh manure, F.M., is used to bank sides when used as coldframe or hotbed.

We found it desirable to run a line of water pipe, with taps at convenient intervals, inside the frame, for watering plants during severe weather.

For the purpose of working inside with sash closed a plank is arranged, as shown in fig. 7, eleven feet four inches long, with a hog chain of heavy wire to support the weight, and light strap iron with hooks on ends to hang on rafter rails, at either side, so that men may work from it over bed in planting, weeding, etc.



Fall Care of the Lawn

THOSE who are becoming so discouraged at the present appearance of their lawns may take some cheer in the knowledge that September is the best season of the year to get rid of such annoying interlopers as dock, dandelion and crab grass. Work done now yields more permanent and satisfying results than in the spring, although it does take considerable muscular effort.

The deeply rooted weeds, dandelion and dock, must be dug out with some weeding instrument, going so deep that there is no possibility of their growing again.

With crab grass the case is different. By the end of August this pest will be found to have crept over much of the lawn



An Interior Furnished and Decorated by

John H. Gutaff

ITALIAN, FRENCH AND ENGLISH
DECORATION AND FURNISHING

10 East 33rd Street

NEW YORK CITY

and crowded out much of the grass. Take a sharp toothed rake and carefully pull these runners or creeping stalks to the surface, then run the lawn mower over with the knives lowered so that it will cut very close to the ground. The plant is of annual nature, dying each fall, but its seeds come up each June unless prevented in this manner.

In the places left bare by these operations, work the soil loose and sow good seed. It will have time to become well established before frost, and indeed if this procedure is carried out, the lawn should look its best by the last of October.



Facts and Figures in Connection With Outside Painting.

(Continued from page 175.)

tionary, and by three times the girth for rolling slat blinds. The measurements of window sash are obtained by multiplying the height by one and one-half times the width, and if fancy by three times the width. The surface area of the columns is obtained by multiplying the height by one and one-half the girth, and fluted columns by twice the girth. Tin roofs and flat sides are measured by simply multiplying length and breadth. Chimneys, conductors, spouts, barge boards and crestings are estimated by multiplying the length by four times the girth. In dipping shingles one thousand shingles are estimated for each four hundred square feet of finished surface.

It will be seen that this estimate of the surface area of the house to be painted is quite different from simply multiplying height by the breadth. But it is necessary in order to include in the surface all the small under parts that must be touched. The professional painter must take cognizance of this, more on account of the time required for painting than because of the extra paint. It requires nearly twice as much time to paint a broken than a flat surface, although nearly the same amount of paint may be used on each. The simple, plain houses which are so much in fashion to-day are therefore cheaper to repaint than those broken up with many gables, balconies, and gingerbread ornaments. To paint a house of the latter type a painter will add nearly one-third to his estimate for a plain house. So in the long run the plain house of straight simple lines is not only cheaper to build, but less expensive to keep in repairs and well painted.

After making his estimate of surface area—which by the way is generally one-third more than the area obtained by simply multiplying the length by the breadth, or one-half more for a house elaborately ornamented and broken up—the painter usually charges for work and paint materials at the rate of ten cents per square yard for one coat, and thirty cents for three coats. This is for new work. For

B. Altman & Co.

INVITE INSPECTION OF THEIR NEW STOCK OF
ORIENTAL CARPETS, RUGS & HALL RUNNERS

ANTIQUES AND SEMI-ANTIQUES

ALSO FINE SPECIMENS OF MODERN ORIENTAL
RUGS ESPECIALLY SELECTED WITH A VIEW TO
HOME DECORATIVE REQUIREMENTS.

MODERN PRICES PREVAIL

Fifth Avenue

THIRTY-FOURTH STREET
THIRTY-FIFTH STREET

New York



One of our many models now in stock.

Call or Write for Our Catalog and Full Information on Kitchen Equipment.

A Combination Range for Every Purpose

Good for winter cooking with heating; good for summer cooking without heating—the

Deane Combination Coal and Gas Range

Two ranges in one. Has ovens, gridiron broilers, toasters and all other up-to-date features. Gas and coal can be used at the same time when preparing a big meal; or separately as desired. Don't buy any range before calling upon us.

Bramhall-Deane Company,
261 W. 36th St., New York City
Cooking Apparatus of All Kinds

Iron Railings, Wire Fences and Entrance Gates of all designs and for all purposes. Correspondence solicited: Catalogs furnished.

FENCE

Tennis Court Enclosures, Unclimbable Wire Mesh and Spinal Netting (Chain Link) Fences for Estate Boundaries and Industrial Properties—Lawn Furniture—Stable Fittings.

F. E. CARPENTER CO., 253 Broadway New York City

Stumpp & Walter Co.

OFFER

GIANT DARWIN TULIPS

For the Permanent Garden Makes the Display During the Month of May—Plant Now

We offer the following five varieties which are in every way the best distinct five.

	Dos.	
BARTIGON. Brilliant crimson, interior shaded scarlet, white base. A grand flower. Can be forced in bloom the beginning of February. Height, 24 inches.	100	
BARONNE DE LA TONNAYE. A long and beautiful flower; clear carmine-rose at mid-rib, toning off to soft pink at the edges; base, white, tinged blue. Height, 24 inches.	\$0.50	\$3.50
LA CANDEUR (White Queen). Almost pure white; of sturdy habit. Height, 22 inches.	0.40	2.50
THE SULTAN. Glossy maroon-black. May be called the black tulip. Height, 22 inches.	0.35	2.75
PRIDE OF HAARLEM. Magnificently formed flower of immense size; coloring brilliant, deep salmon rose, shaded scarlet, light blue base. Award of merit, R. H. S. Height, 23 inches.	0.35	2.75
	0.40	3.00

SPECIAL OFFER. Ten each five varieties, 50 bulbs, \$1.50

Our catalog bulbs for autumn planting just issued. A comprehensive catalog of the best bulbs to plant this fall mailed free on request.

Stumpp & Walter Co.

Department H.

50 Barclay Street

New York City





Plain Words from a Painter to a House Owner

"You would think that painters averaged better than bankers, lawyers or merchants, the way people trust them," said an old painter to a property owner who had called him in to tell why his painting had gone wrong.

"Painters will average just as high in skill and honesty as any class, perhaps," he continued, "but we have fakirs to contend with in our trade as much as you do in yours. And you property owners leave everything to the painter who bids lowest.

"There is nothing much wrong with this job except that the painter used a substitute for pure white lead and did his work too hurriedly. I suppose he had to do it in order to make anything on what you paid him.

"Next time specify pure white lead guaranteed by the 'Dutch Boy Painter' for all your painting, and give the good painters in your community an even chance. Then allow them time to do the work right."

Ask us for "Dutch Boy Paint Adviser No. 691." Includes information on painting decoration (in the house and out)—flower and shrubbery arrangement, etc.—a most valuable collection of booklets—free.

NATIONAL LEAD COMPANY

An office in each of the following cities:

Cincinnati	Chicago	Cleveland
New York	Boston	Buffalo
San Francisco	St. Louis	

(John T. Lewis & Bros. Co., Philadelphia)
(National Lead & Oil Company, Pittsburgh)



old work the charges are generally fifteen cents per square yard for the first coat, twenty-five cents for two coats, and thirty-five cents for three coats. This price varies somewhat in different parts of the country. In the South, for instance, three coats of old work are applied for twenty-five cents per square yard. Varnishing is generally based on a charge of 15 cents for one, and 30 cents for two, coats. This is for ordinary varnishes, and for special high grades more is demanded.

From these figures it is possible for one to make a rough estimate of what it should cost to have his house painted in a workmanlike manner and with the best of paints. Where there is little competition it might be well for a property owner to have a pretty fair idea of the cost of the work, and he can tell then if he is paying a good deal more than the market price for similar work in other parts of the country. When a paint contractor comes in and makes a survey of the job, and gives a bid for it, it is quite necessary that the owner should have an approximate idea of the cost. This may result in cutting down a bid anywhere from \$50 to \$100. Unscrupulous painters will frequently take advantage of a house owner's ignorance if they think there is little chance of the over-charge being detected.

One may be partly prepared to estimate the cost of painting the house without the aid of a professional painter. As the cost of the labor runs from two-thirds to three-fourths of the total cost of the job, one must be prepared to find a startling difference when the owner does all the work himself. Thus if the surface area of his house measures 7,200 square feet or 800 square yards, the cost of the job would be \$80 for one coat or \$160 for two coats, at ten cents per square yard per coat. The cost of paint for the two coats should be only about \$55 to \$60. The rest represents the labor of the painter. We can estimate the amount of paint needed by the other method given above. You divide the number of square feet by 200, and this gives the number of gallons of white lead in oil needed for two coats. In this case 7,200 square feet divided by 200 gives 36. If we pay \$5 a gallon the material for the job will cost \$180, but good paint can be had for much less than this, which will leave a margin for extras.

If one does not count his own labor the work of painting the house is not an expensive job. It can be undertaken without much fear of extra costs which frequently loom so large in carpentry and cement work. Painting exterior surfaces is really a simple operation. The chief thing is to work the first coat in thoroughly, spreading the paint well so that it will not be thicker in places. When this has thoroughly dried the second coat should be applied a little thicker. The chief thing in the second coat is to secure a uniform, smooth surface without streaks or lumps. Much depends upon keeping the paint properly thinned so that it will not streak, and not so thin that it will run.



Write for this book

and samples of the new window shade material in all colors and in Brenlin Duplex—light one side, dark the other.

This book is full of illustrations and information on Brenlin—the new window shade material that outwears several ordinary shades.

Brenlin is made without the "filling" that in ordinary shades falls out and leaves ugly streaks and pinholes

Brenlin

TRADE MARK REG. U.S. PAT. OFF.

Window Shades

won't crack, won't fade; water won't spot them. They always hang smooth and even—always look fresh and attractive. Brenlin always proves to be the cheapest shade you can put up.

One or more good dealers in all cities sell Brenlin. Write us for samples in all colors, and in Brenlin Duplex, light one side, dark the other. These samples, with the beautiful little Brenlin book will aid you in selecting just the right color. Write today to the

CHAS. W. BRENNEMAN & Co.,
2069-2079 Reading Road, Cincinnati, O.

The name **BRENLIN** is perforated along the edge of every yard of genuine Brenlin.
Look for it.

SAVE YOUR TREES

They are too precious to lose. Get expert surgeons to examine them and advise you as to what they need. Avoid tree fakery and tree butchers. Our free booklets explain tree surgery, the science founded by John Davey. Write for them.

The Davey Tree Expert Co., Inc., 459 Acorn St., Kent, Ohio

Smoky Fireplaces

Made to Draw

Your particular chimney problem studied by experts, and estimates given without charge. The work is undertaken with this understanding: **We will not accept payment unless successful.** Kitchen ventilating systems, preventing cooking odors.

FREDERIC B. WHITLEY Engineer and Contractor
215 Fulton Street, Brooklyn, N. Y.

Write for the
Connoisseur Book ON CUT GLASS
TUTHILL CUT GLASS CO.
MIDDLETOWN, N. Y.

Can Be Used In
HOUSE and GARDEN
Aphine
The Insecticide that kills plant Lice of every species.
For flowers and vegetables. Used as a spray. Get it from your dealer or write for particulars to
Aphine Manufacturing Co., Madison, N. J.

Lest You Forget

about those TREES, EVERGREENS and SHRUBS you intended planting.

AUGUST, SEPTEMBER and OCTOBER are the best coming months to plant in.

WE OFFER SOME MORE

Bargains at Half Regular Prices

Large Box Trees
Large Blue Spruce
Rhododendrons
Lilacs
German Iris

Paeonies
Hardy Vines
Large Fruit Trees
Hardy Roses
and many other varieties

Special Half-Price Bargain List
mailed free on application.

Rose Hill Nurseries

NEW ROCHELLE, N. Y.

Please mention House and Garden.

PAEONIES

Our Summer and Fall Garden Guide contains a full list of Paeonies "worth growing"—not a "long" list—but a "short" list that will cover all your needs, as to color—and will bloom early, mid-season and late the first year after planting, if ordered now.



Boddington's Summer and Autumn Garden Guide Now Ready

48 pages, fully illustrated throughout from actual photographs; cultural directions and descriptions accurate. It contains a full list of Bulbs and Seeds for summer and fall planting—with full cultural directions and other valuable information. It is mailed free upon request. Send a postal card today.

ARTHUR T. BODDINGTON, Seedsman
Dept. H, 342 W. 14th St., NEW YORK CITY

SUN DIALS

Any Latitude

E. B. MEYROWITZ, 101 East 23d St., New York
Branches: New York, Minneapolis, St. Paul, London, Paris

A Beautiful Illustrated Booklet, "WHERE SUN DIALS ARE MADE," sent upon request. Estimates furnished.

PEONIES

You should send *today* for our new catalog of Peonies, Iris and Philox. We have grown these perennials for forty years and have a fine collection.

T. C. THURLOW'S SONS, Inc., WEST NEWBURY, MASS.

Ellwanger & Barry's Peonies Phloxes Iris

Are Unsurpassed in Variety and Quality

The Best Results are to be Obtained
by Planting in September

Illustrated booklet with descriptions and planting directions FREE upon request.

MOUNT HOPE NURSERIES
Rochester, New York



In many places, the Imperial Floor is laid.

THE IMPERIAL FLOOR is made of newly discovered mineral composition, which makes it absolutely germ-proof, fire-proof, water-proof, and practically wear-proof. It can be laid over any old or new floor without expensive preparation and presents a smooth, warm, non-slipping surface without cracks or crevices to collect dirt or germs.

The ideal flooring for private houses and public buildings. Our booklet and samples free.

THE IMPERIAL FLOOR CO., Mill and Furnace Streets, ROCHESTER, N. Y.



"MARIE JACQUIN"

The Lure of the Peony

to him or her who happily knows it in its modern varieties, is irresistible—an ever increasing charm and delight as the years come on.

Think of a flower with a range of delicacy and coloring which a de Longpré might well despair of imitating—a fragrance which a Colgate, a Gallét might envy—and you have the Peony of to-day.

Think too, of a flower easier to grow than a geranium—that when once planted lasts, with yearly increase in volume and beauty, as long as the planter—and longer—and again you have the Peony.

And the wonder of it all is that perhaps you are still in ignorance of the merits of this the most beautiful flower of our day—that your knowledge is limited to the "Piny" of your childhood.

Some day, by chance or otherwise, you will somewhere see blooming PETERSON'S PERFECT

PEONIES and then regret that you did not know of them before.

And then remember please that my Peonies represent the cream of the World's achievement—the best that money can buy.

That their enviable reputation is due to eighteen years of enthusiastic devotion—that for years, with no other business enterprise, I have given my entire time exclusively to this flower and the Rose; and remembering all this, can you wonder that "Peterson Peonies" are spoken of as in a class by themselves? AND THEY ARE.

May I prove it to you?

My catalog, reflecting the quality of my Peonies, is mailed on request.

George H. Peterson, Rose & Peony Specialist, Box 30, Fair Lawn, N.J.



Brand New House For Sale

IN restricted residence park at Hastings-on-Hudson. On wooded plot 50 x 100, overlooking Hudson and Palisades. Living room, den, dining room, pantry and kitchen on first floor; 3 bedrooms on second. Finest plumbing throughout. Exceptional closet and window-seat room. Built by owner for his own use. For further details address

E. F. ALLEN, Room 949, 346 Broadway, New York

PROTECT Your floors and floor coverings from injury. Also beautify your furniture by using Glass Onward Sliding Furniture and Piano Shoes in place of casters. Made in 110 styles and sizes. If your dealer will not supply you Write us—**Onward Mfg. Co.** Menasha, Wisconsin, U.S.A. Canadian Factory, Berlin, Ont.



IRON AND WIRE FENCES

Fences of all descriptions for City and Suburban Homes. Write today for our Loose Leaf Catalog, stating briefly your requirements.

Fence Department

AMERICAN WIRE FORM CO.
100 Church Street NEW YORK CITY

The Final Note of Comfort for Bed-Room or Living-Room

Because of its peculiar decorative value and superior quality in every detail of construction, our **HAND WROUGHT WILLOW FURNITURE** commands a place in even the most lavish home. For the unpretentious apartment or bungalow no other investment insures artistic results at such a low cost.

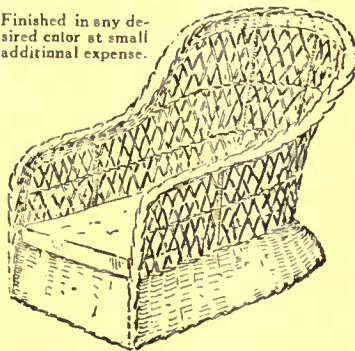
This Furniture is recognized by leading interior decorators as the best Willow Furniture that can be produced.

Sketch sheets showing a great diversity of styles with price list mailed on request.

Selections returnable if not satisfactory.

WALTER J. BRENNAN CO. - - 436 Lexington Avenue, NEW YORK
(Opposite Grand Central Station)

Finished in any desired color at small additional expense.



HAVE ELECTRICITY IN YOUR COUNTRY HOME

Install an Alamo-Westinghouse electric lighting set in your house. Those who are using them wonder why they have for so long been satisfied with inferior lighting systems.

These little plants are safe, durable, economical and do not require the services of an engineer.

We also install Complete Water Systems of all kinds.

ALL OF OUR APPARATUS IS GUARANTEED

Write for our Booklet entitled **Electric Light & Power for Country Home & Farm.**

ALAMO MFG. CO.,
HILLSDALE, MICH.

Eastern Representatives
OTIS & WELLS
Electrical Engineers
2 Rector St. New York City
CHAS. PFAU, Bourse Bldg., Phila.



"CRAFTSMAN" HOUSE PLANS FREE



Designed by **GUSTAV STICKLEY**

Send 6 cents for a copy of "THE CRAFTSMAN HOUSE" showing exterior and floor plans of 24 houses that cost from \$500 up to build. To interest you in our magazine, "THE CRAFTSMAN," and in Craft articles, we will also send you a beautifully printed 32-page booklet entitled "The Craftsman House."

If you are interested at all, both of these books will be very useful to you.

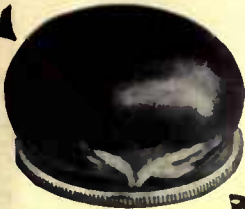
"THE CRAFTSMAN IDEA" means real homes, not mere houses; it shows you how to save money on useless partitions—how to avoid over-decoration, how to get wide sweeps of space (even in a small house), restful tones that match and blend—and enables anyone to always have a beautiful and artistic home.

"THE CRAFTSMAN MAGAZINE" treats of building, furnishing and beautifying homes—of art—embroidery—cabinet work—and kindred topics.

"CRAFTSMAN HOMES," by Gustav Stickley, 205 pages, beautifully bound and printed, treats of home building, home making, home furnishings in full.

"THE CRAFTSMAN" - - - - - 83¢ All for
"CRAFTSMAN HOMES" - - - - - 82¢ \$3.75
Your own selection of 120 House Plans
Edgar E. Phillips, Manager The Craftsman, Room 248, 41 W. 34th St., N.Y.

Grow Chestnuts Like This For Profit



Covers a 50c. piece.

You can get bigger profits per acre from Sober Paragon Chestnuts than from any other crop.

Hardy, rapid, symmetrical growth; luxuriant foliage; spreading boughs; clean trunk; stateliness.

These qualities combined and developed by science to a degree that closely borders perfection, in the new

SOBER PARAGON Mammoth, Sweet Chestnut

Crop, Fall of 1910, brought \$48,000, orchard only 8 years old.

The only large sweet chestnut in the world.

Bears the second year. The nuts average 1 to 2 inches in diameter—and 3 to 5 nuts in a bur.

United States Pomologist, G. B. Brackett, says "The Sober Paragon comes the nearest in quality to the native chestnut of any of the cultivated varieties that I have examined. It is of large size, fine appearance and excellent flavor."

Testimony from growers, commission merchants, Forestry Experts, etc., given in our free booklet, together with prices and particulars.



We own exclusive control of the Sober Paragon. This copyrighted metal seal is attached to every genuine tree when shipped.

Write today for the booklet.

OTHER NUT TREES, Fruit and Ornamental Trees, Roses, Shrubs, etc.,

Our 1911 Illustrated Catalog and Planting Guide, with prices—Free.

GLEN BROS., Glenwood Nursery
44th Year. 1808 Main Street, ROCHESTER, N. Y.

SARGENT

Artistic Hardware and Locks for residence or public building. Many patterns.

Catalogue on request

Hardware Sargent & Co. 142 Leonard St. New York

Preserve your Rugs

One of the facts that has brought

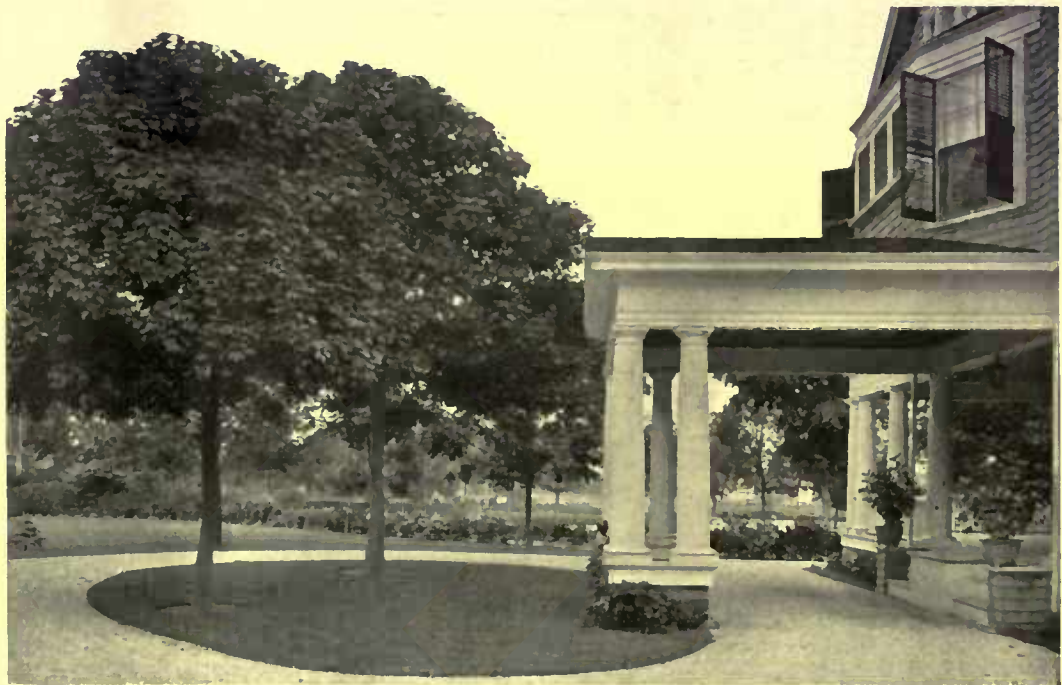
BISSELL

Carpet Sweepers

into so great favor is the actual saving they accomplish, making carpets and rugs wear more than twice as long. This saving of carpets is easily explained, as the rapidly revolving brush searches into the piles of the carpet, lifting dust and dirt out, depositing it in the pans within the sweeper-case. If this dirt and sand is allowed to stay in the carpet, or is ground down into it by a broom, it acts as a grindstone, cutting the fiber of the carpet at each move on the carpet. Price \$2.75 to \$5.75.

BISSELL CARPET SWEEPER CO.

Dept. 131 Grand Rapids, Mich.
(Largest and Only Exclusive Carpet Sweeper Makers in the World.)



AN OBJECT LESSON FOR THE MAN WHO BUYS SAPLINGS INSTEAD OF HICKS' BIG TREES

IN TEN or fifteen years the saplings in front of the house below will possibly be as big as those in the illustration above. Perhaps they will be shapely sturdy specimens—perhaps not. It's rather of a chance!

How much more sensible—more economical it is to simply come to Hicks' nursery and pick out **grown trees** that are sturdy, well developed, beautiful specimens and get immediate results and get **just the results you want** with the long wait left out. One fine linden or maple with an 8 inch trunk and 20 feet spread of branches would cost a little more than those pa-



ISAAC HICKS & SON Westbury, L. I.

thetic saplings, but it would at once add at least \$200 to the property's value, to say naught of the welcome protection it would afford.

You take no risk in buying Hicks' big trees—for Hicks' trees thrive. Now is the time to move evergreens; and from next month on, Maples, Lindens, Catalpa and Pin Oaks. Come to our nursery and pick out your trees.

If you can't, then send for our catalog. It's an easy matter to order from it. Pines and evergreens can be moved now. Maples, Lindens, and the like, from October on. But now is the time to arrange for it. Do not wait till Spring—that's a mistake.

Gold Medal Paeonies

ON June 10th the Massachusetts Horticultural Society awarded me a gold medal for excellence of cultivation and correct nomenclature in present and past exhibitions. No one can get a higher award.

All the choice varieties in the world, and correctly named. **LISTS FREE.**

E. J. SHAYLOR

Wellesley Farms, Massachusetts



THREAD and THRUM RUGS 16 FEET

are made seamless, of pure wool or camel's hair, in any width up to and in any length, color or combination of colors, 65 regular shades—any other shading made to match.

Send for color card and name of nearest dealer.

Thread & Thrum Work Shop
Auburn, N. Y.

"You choose the colors, we'll make the rug."

New Roses Originated by Jackson Dawson

Lady Duncan, Dawson, Daybreak, Farquhar,
William Egan and Minnie Dawson

WRITE FOR PRICES

Eastern Nurseries

Henry S. Dawson, Mgr.

1090 CENTRE STREET

Jamaica Plain, Mass.

"ACHIEVEMENTS IN HOUSE HEATING"



*Kelsey Heated. Berkshire Hills, Mass.
Delano & Aldrich, Architects, New York*

KELSEY HEATING

is for City or Country Homes of any size from 5 to 75 rooms, and for CHURCHES and SCHOOL BUILDINGS.

Let us give you names of prominent users.

SEND FOR THIS BOOKLET

So that you may know what GOOD HEATING REALLY IS, and what has been accomplished in heating and VENTILATING fine residences by the

KELSEY FRESH AIR SYSTEM

EVERY HOME BUILDER who prefers good ventilation and healthful heating to the warmed over, unfit-to-breathe, unhealthful air of steam and hot water radiators SHOULD INVESTIGATE KELSEY HEATING.

40,000 HOME OWNERS

have installed Kelsey Heating because it's most EFFICIENT and ECONOMICAL and for the MORE IMPORTANT REASONS that it supplies a COMPLETE CHANGE OF PROPERLY WARMED AIR TO EVERY ROOM 3 to 5 TIMES PER HOUR, and is most easily managed and regulated.

KELSEY HEATING CO.

Main office: 66 Fayette St., Syracuse
New York Office: 154-c Fifth Ave.



The New Berry—Giant Himalaya

VINE grows 40 feet a year unless trimmed. Hardy as an oak—will stand the winters in any part of the country. Bears enormous crops of rich black berries—ten tons have been gathered from 500 plants. Berries nearly an inch long, sweet, melting, delicious.

Plants ready September 1st. 10 cents each; \$1 a dozen; \$3 per hundred; \$25 a thousand. Add 10 per cent when wanted by mail. Send for BERRYDALE BERRY BOOK. Tells about other berries.

Berrydale Experiment Gardens
House Avenue Holland, Mich

HARDY, OLD FASHIONED GARDEN FLOWERS

Now is the time to plant Paeonies, Phlox, Irls, Oriental Poppies, etc. Send for my Catalogue and special list of choice perennial plants and everblooming Hybrid Tea Roses, etc. Waterlilies and hardy plants a specialty.

WM. TRICKER, Arlington, N. J.

MOLES Killed by the Brownie Bean

Send 25 cents for enough beans for small lawn or garden, or \$1.00 for carton containing over 500 beans. BROWNIE CHEMICAL COMPANY, Bound Brook, N. J.



Old English Garden Seats

HARDY FERNS

Send for Catalog

NORTH SHORE FERNERIES CO.
Beverly, Mass.

The Wadley Nursery Co.

WE HAVE READY FOR SALE

More than 60 Acres of Growing and Grown Nursery Stock

The result of years of skillful effort. This stock is complete in every way and is ready for your inspection. We extend you an invitation to call and select your plants, shrubs and trees from the growing stock, or, if this isn't convenient, we will gladly send you catalog of prices and description. If you prefer, our salesman will call upon you, and assist in selecting your assortment.

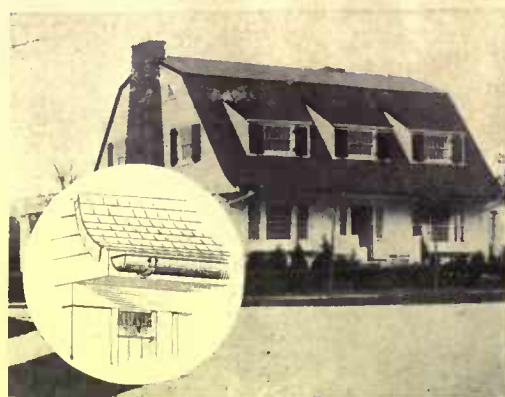
Tree Moving We have the biggest and best equipped tree movers and can move big, thrifty growing trees any distance. Select your tree and we will move and plant it.

Landscape Contracting We will assist in planning your grounds and contract for the work on large or small places. Permit us, at least, to put in a bid for high-class work.

Expert Tree Surgery We combine the best scientific and most practical work. Years of experience in preserving, planting and revivifying trees combined with careful study have developed this very necessary work.

WADLEY NURSERY CO.
BOUND BROOK, NEW JERSEY

Write and Tell Us
of Your Needs



This house is equipped with the hanging type of Indestructible Gutter. Don't repair your old gutters or decide on any for your new house until you have investigated the Indestructible.

A New Gutter That is Indestructible

INDESTRUCTIBLE because gutters of this type have been proven so by over a century of use in England. If they will stand that moist, foggy climate over there, they ought surely to last for practically all time in this country.

They are made of cast iron. A high grade cast iron that does not rust out.

When you consider their freedom from repairs, these gutters are less expensive than good quality sheet iron—and decidedly cheaper than copper. They are not affected by salt or acid air.

They are easy to erect. Made in two styles, the Hanging and the Moulded Face. The latter forms an ornamental part of the moulding, and is not discernible as a gutter.

Send for circular. Along with it we will send you a short length of each of the two styles of gutter. You can then see for yourself.



Half Round hanging gutters are made in 6 feet lengths, in two different sizes.

HITCHINGS & COMPANY

Spring Street Elizabeth, N. J.

H. T. DEMPSTER

CARRARA, ITALY

Maker and Importer of Statuary and Decorative Marbles

Designer and Furnisher of Italian Gardens

NEW YORK OFFICE, 39 EAST FORTY-SECOND ST.
CARRARA MARBLE

The Regular Dunning Boiler

THE HEART OF HOUSE HEATING

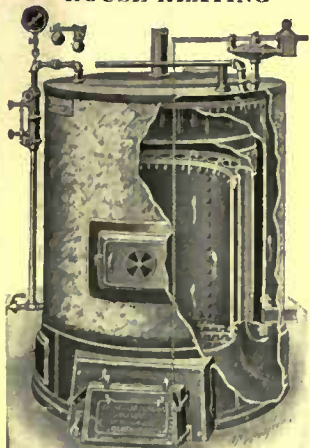
Comfort or discomfort in your house during the cold winter months will depend largely upon your heating system.

The safety, strength and durability of DUNNING BOILERS is shown in the material used in their construction.

If you are interested in construction, wrought steel will interest you, if in results, then read what our customers have said over a record of 25 years. Yet no expense is being spared to turn out boilers that will surpass this record—a record that has never been equalled.

Don't put in a heating system that you know little or nothing about, don't jeopardize your future comfort before you know what DUNNING BOILERS have done and are doing. It will only cost you a stamp and the energy to find out now, it will cost you a great deal more if you don't.

New York Central Iron Works Co., 5 Main St., Genesee, N. Y.



HARDY PHLOX

Are unsurpassed in the garden. I have one of the largest collections, over 250 varieties. Every kind in the market. I also have some very fine Iris, Delphiniums and Hibiscus.

Send for list.

W. F. Schmeiske, Binghamton, N. Y.



Send 15c. New Booklet

GARDEN POTS

UNIQUE DESIGNS, FINE WORK, EVERY STYLE. FOUNTAINS, PEDESTALS

EXPERT FRANCIS HOWARD
5 West 28th St. New York

Ellen Shipman—Garden Expert
Cornish Hills - New Hampshire

WILL MAKE AND SUPERVISE WORKING PLANS AND PLANTING OF GARDENS, OR FOR SMALL GARDENS WILL MAKE SUGGESTIONS AND SKETCHES BY LETTER.

P. O. ADDRESS

PLAINFIELD - - NEW HAMPSHIRE

TIME SAVER— MONEY SAVER



Makes your hedge trimming five times as easy. Every single movement counts—blades work both opening and closing.

The UNIQUE HEDGE TRIMMER

Mows a 13-inch swath. Cuts easily—cuts evenly. Workmanship and material indefinitely guaranteed.

Sent prepaid on receipt of \$5.00

If not satisfactory after one week's trial, can be returned and money will be refunded. Write for booklet.

Fountain Cutlery Co., 927 Filbert St. Philadelphia, Pa.

Refer to any bank in Philadelphia.

FLINT'S FINE FURNITURE

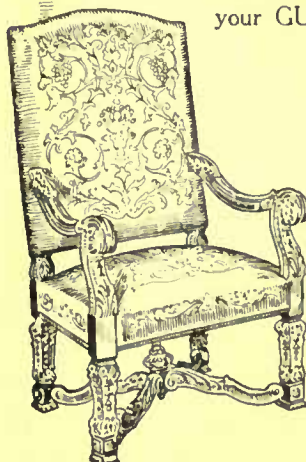


ADVANCE SHOWING OF FALL and WINTER STYLES

This exhibit of Fine Furniture is the largest and most comprehensive we have ever assembled.

Authentic reproductions of the best examples of every period famous in furniture history and many exclusive patterns designed and wholly executed by our own artists and craftsmen.

Our TRADE MARK and ONE STANDARD of QUALITY is your GUARANTEE.



GEO. C. FLINT CO.

43-47 WEST 23rd ST.

24-26 WEST 24th ST.

IN HOMES WHERE QUALITY COUNTS
you will find the

BRUNSWICK

HOUSEHOLD
REFRIGERATING
and ICE MAKING PLANTS

PERFECT REFRIGERATION
INDEPENDENCE OF THE ICE MAN

Each plant is designed to meet the requirements of the individual home, and guaranteed to do the work that it is designed for.

Our strongest argument is the testimony of BRUNSWICK users.

Write for list of installations, and if you are not convinced on the spot, you will at least be interested and the game half won.

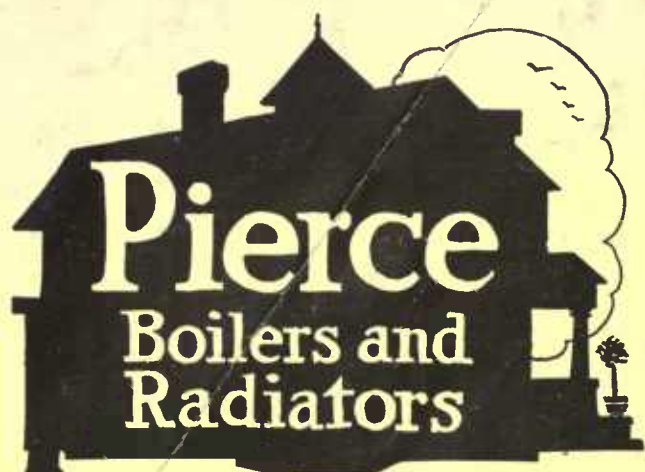
A postal will bring full information.

INVESTIGATE.

RISK A PENNY.

The Brunswick Refrigerating Co.
New Brunswick, N. J. Branch Offices or Agencies in Principal Cities



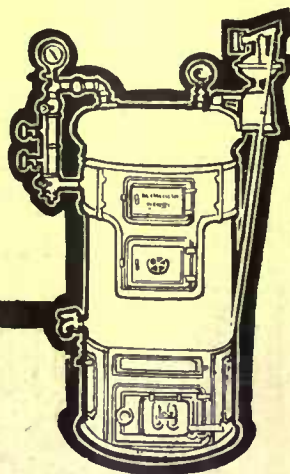


There is another winter coming. Does it mean furnace drudgery, excessive coal bills and a shivery breakfast every cold snap for you?

Don't blame the weather; don't blame the house; don't blame the furnace—it does the best it can. Instead, put in a modern, sanitary, adequate, economical Pierce Heating Equipment—a steam or hot water system that is a success in over 200,000 homes. Pierce Boilers are built to meet every heating requirement. They save fuel, require little attention, cannot get out of order, and save their cost long before they have served their time.

Your steam-fitter will tell you just what Pierce Boiler your house needs, and the cost.

Pierce, Butler & Pierce Mfg. Co., 242 James St., Syracuse, N. Y.
Showrooms in Principal Cities



What Heat for your House?

A Primer for the man who is about to build a new house or make an old house comfortable.

Be sure to send for our **HEAT PRIMER**

It's free and it's just the kind of information you ought to have; presented in simple, non-technical language. Send for it.



There is a Pierce Boiler exactly suited to your needs. This is the "Modern," one of 200 styles

Highlands Nursery & Salem Branch Nursery

(4,000 ft. elevation in the Carolina Mountains)

The largest collection of Hardy American Plants in the world.

Rhododendrons, Kalmias and Andromedas for August and September
Planting give splendid results the following spring.

Our *tried native species* are the best and the *only absolutely hardy ones*. Write now for Beautifully illustrated Catalogue which tells how to grow these things successfully.

Harlan P. Kelsey, owner

Salem,

Mass.



Johnson's Wood Dye

Endorsed by Architects—Contractors—Painters—and Home Owners Everywhere

JOHNSON'S Wood Dye is not an ordinary stain—but a permanent Wood Finish of great beauty and durability for all interior trim and furniture of every character. Johnson's Dye is now extensively used by leading architects and contractors everywhere for finishing Red Gum—Cypress—and other soft woods, as well as the most expensive hard woods. It gives the wood a lasting, beautiful finish without raising the grain—and when used in connection with Johnson's Prepared Wax it produces the beautiful, dull, artistic finish now so popular.

Instruction and Specification Book FREE

Let us furnish you a copy of the latest edition of our beautiful and profusely illustrated book on Wood Finishing, together with a sample of any shade of dye desired. Johnson's Wood Dye is made in 15 standard shades as listed below, and with it you can obtain any desired effect with the most inexpensive woods.

Don't you want this Book—Free—and samples of the Dye and Wax? Ask your local dealer for them. We have supplied him for your use but if he does not furnish you with them drop us a postal H99 and we will see that the samples and book reach you at once.

S. C. Johnson & Son *The Wood Finishing Authorities*
RACINE, WIS.

THE TYLER HOT WATER GENERATOR



For Domestic Purposes

Will fit any hot-water, steam or warm-air heater or surface burning stove, and will supply all the hot water required for the kitchen, laundry and bathroom from the

Same Fire that Heats the House

FREDERICK A. TYLER

Manufacturer

30 Beaver Street

Albany, N. Y.

Send for Descriptive Catalogue



REAL ESTATE DEPARTMENT



"Twin Oaks Farm"

THIS beautiful Virginia Estate of about 180 acres, located within three miles of Warrenton, Fauquier County, Virginia, on a macadamized road, is offered for sale at a most attractive figure.

The residence, built of stone and frame, consists of 13 rooms and two baths. Lighted by acetylene gas, heated by furnace, is one of the handsomest residences in Virginia and most complete in all detail. It is situated on a hill commanding a superb view of the surrounding valley and mountains.

Complete coach house, poultry house, sanitary cow barn, hog houses, meat house, servants' quarters with bath, laundry, milk room, etc. Large farm barns and tenant houses.

The land is most fertile and well fenced, amply watered. This farm is just about as near a perfect country estate as can be found. No remodeling, no repairs necessary. Ready to move into and enjoy the delightful Virginia country life.

For full particulars, illustrated booklet, etc., write to

HARRY M. HUBBELL
Warrenton, Fauquier Co., Virginia

FOR SALE—Fine Large Residence
in a beautiful village, all improvements. Also a farm of 132 acres just outside the corporation, three houses, all improvements.

G. F. PITTS

WARWICK.

NEW YORK

Have you tried AIKEN?

Have you a WINTER HOME?

IF NOT—I can sell you Deodora Cottage, renting for \$2000. Aiken is the place for rest, amusement and recreation. Golf, Tennis, beautiful drives and electric lights. I have many other attractive homes for sale or rent, and I am sure I can suit you—Let me try
JOHN LAIRD Real Estate AIKEN, S. C.
Write For Renting List

We Finance Country Homes

We will build according to your own ideas, on specially selected property, in Westchester County, vicinity of Bronxville and Tuckahoe, and on North Shore of Long Island. Write for particulars.

The Debenture Corporation of New York
No. 334 Fifth Avenue New York City



"Edgemont Estate" At Scarsdale Station

The ideal realization of out-of-town living. A delightful home community, for all-year residences. Protected social environment, the charm of the country, all city improvements. Immediately at station, only 19 miles on Harlem Elec. Div. N.Y. Cent. R.R. Special advantages to be secured for those building during the present season.

Write for Booklet A

Scarsdale Company

J. Warren Thayer, Pres.
Scarsdale New York 503 Fifth Ave. New York City

PHILIPSE MANOR



A Mile on the Hudson

HOUSE-CRAFT SUPERB

Attractive, desirable houses are those which wear well, preserve their charm year after year and are a source of pride to one's neighbors as well as to the owner.

At Philipse Manor can be found more than twenty newly constructed, strictly modern houses whose attractive architecture and thorough construction assure their meeting this requirement in an exceptional manner.

EXTERIORS

Every desirable form of architecture is represented, including Colonial, English, Italian, Moorish and others. Designed by the Country's foremost architects each house is a distinctive type of its class in which old ideals are preserved and modern requirements fulfilled.

INTERIORS

The interior arrangements are considered by experts to be idealistic. The dominant idea has been the embodiment of comfort, convenience and tasteful elegance, in one harmonious whole. In every case is preserved that unity of dimensions essential to artistic beauty.

LOCATION

Within 25 miles of Grand Central Station, Philipse Manor is situated at one of the most beautiful points of the Hudson River. It is a part of that section designated by Washington Irving, in his "Legend of Sleepy Hollow," as an "Enchanted Region." Adjoining it are numerous large private estates as well as the renowned Sleepy Hollow Country Club.

PRICES AND TERMS

Just now these houses can be purchased at unusually attractive prices and on a most liberal 5% mortgage basis. Write for illustrated booklet and full particulars. Address Department M.

Offices at
Philipse Manor
White Plains

Cooley & West Inc.
Telephone Murray Hill 4430
331 Madison Ave. N. Y.

Offices at
Mount Vernon
New Rochelle

Hotel site for sale, 10 acres, prominent Ave., most fashionable resort Southside, L. I. very favorable terms. Owner, c/o this Magazine.

Princeton

This substantial town, with its beautiful avenues and handsome residences, is a splendid place for ideal living. Convenient to both New York and Philadelphia—fast trains.

Rentals \$300 to \$6,000 yearly. Completely furnished homes also for rent.

Choice properties—town and country—furnished or unfurnished, for sale or rent, in other desirable localities.

WALTER B. HOWE, Princeton, N. J.
New York Office, 56 Cedar Street

RESPONSIBLE and well educated man of high character and business ability desires permanent connection with Realty Company or private owner developing Real Estate in or around New York. Specialist in artistic and practical housebuilding, draughting, specifications, superintendence of building, road making, management of selling department. Life experience in Europe and America. Now at work with New York architect of good standing. Investigation courted. Address "ENERGY," care of House and Garden, etc.



KENNEL DEPARTMENT

The purpose of this department is to give advice to those interested in dogs. The manager will gladly answer any troublesome questions. Address "Kennel Department" and enclose a self-addressed envelope.

Love Me, Love My Dog

You love your dog because he is such a faithful friend and companion, and you feed him on—what? Certainly not on kitchen scraps and raw meat. He deserves better treatment

AUSTIN'S DOG BREAD

makes happy, healthy dogs. It is carefully made to meet the needs of a dog's stomach. If you want your dog to be active and have a glossy coat and a clear eye, you must give him proper food. Careless feeding makes him fat, lumpy and generally unhealthy.

Austin's Dog Bread is the oldest dog bread made in America. It agrees perfectly with the dog's digestion at all seasons of the year. Everything used in the manufacture is bought especially for it.

Let us Send You a Sample, Free

Simply send us your name and address and the name of your dealer on a postal and state whether you want to try Austin's Dog Bread or Austin's Puppy Bread (for puppies under 6 months and small dogs) and we will send you sample by return mail.

You can get Austin's Dog Bread at your dealer's. He has it or can get it for you.

Austin Dog Bread & Animal Food Co.
211 Marginal Street, Chelsea, Mass.

IRISH TERRIER PUPPIES

of both sexes. All from the very best stock.

For particulars address

CLOVERLY KENNELS

West Chester,

Penna.

If You Have a Dog

You Should Read

FIELD AND FANCY

the only weekly in America devoted exclusively to the dog. Sample and Special Trial subscription Offer on application.

FIELD AND FANCY, 14 Church St., New York City



AIREDALE TERRIERS

The best all 'round dog and companion. Our Terriers are blue ribbon winners at New York, Boston, Pittsburg, Chicago, Kansas City and other large shows.

Puppies for Sale, \$25 and Up. Champion Red Raven at Stud, Fee \$20. The greatest living sire.

Beautiful illustrated booklet for stamp. ELMHURST FARM KENNELS
Sta. E. KANSAS CITY, MO.



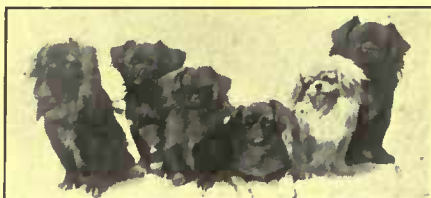
BOSTON TERRIERS

Are you desirous of purchasing the most attractive, as well as cleanly, house companion, or automobile dog, the Boston Terrier? If so, write for prices, full descriptions and photos of young stock. Prices, \$20.00 up.

WINCHESTER KENNELS

119 Winchester St., Toronto, Ont.
"Ch. Lord Bell Rock," at stud, fee \$15

SALE OF PEKINGESE



Returning to England. America's Best Puppies. Red, Sables and Parti-colors. Also Brood Matrons and Adult Dogs. Price, from \$50. Must be sold.

MRS. A. GOODSON

Ai-Gee Kennels Hartsdale, N. Y.
Phone, 1031 White Plains

TOY WHITE FRENCH POODLES, young and grown stock. Pedigreed. Prices reasonable. Also Toy Spitz Pomeranian pups. Write your wants.

MRS. G. C. ROHDE,
Ann Arbor, Mich.



PRIZE WINNING STOCK

English Toy Spaniels, Prince Charles, Rubys, Blenheim
From Prize Winning Stock. Low to close

WILLOUGHBY KENNELS, NORFOLK, VA.

Pointers and Setters

WANTED TO TRAIN ON GAME. PLENTY GAME. TRAINED DOGS FOR SALE

W. GEORGE SMITH

K. 9 Kennels, Maryland, Md.

HANDSOME CATS AND KITTENS FOR SALE—



Domestic and rare foreign varieties. Siamese, Abyssinian, Manx, and Russian. Ideal boarding place for cats, dogs and birds. Model Poultry department, supplies broilers, fowl and squab.

Write for beautifully illustrated catalogue and sales lists.

BLACK SHORT HAired CATTERY
Oradell, N. J.

Send your name and address to-day for a

FREE SAMPLE COPY OF DOGDOM

The oldest, largest and only high-class

EXCLUSIVE DOG MAGAZINE

published. Fully illustrated. Printed on enamel paper. Beautiful original cover designs. Over fifty pages of dog advertisements each issue.

Price \$1.00 a year which includes three premium pictures 12 x 16 inches, nice enough to frame and suitable for den or study—Address
DOGDOM PUBLISHING CO., Battle Creek, Michigan

Russian Wolfhounds

The Best Dog in the world and one of the Rarest Breeds extant. Peerless in beauty and reliability of disposition. Companions for gentlemen, ladies or children.

CATALOGUE "H"

Mirasol Kennels

Pasadena. California



FOX HOUNDS BIRDSONG and WALKER STRAINS

sent on ten days' trial. Drag packs for hunt clubs a specialty; guaranteed to please. Get my liberal guarantee. Also a few coon dogs and several youngsters for sale.

R. F. Johnson,

Assumption, Ill.

The Pekingese Spaniel

IS he hard to raise? and is he a good house dog? These, and numerous other questions are repeatedly asked by people viewing the charming little dog for the first time. This quaint little Oriental, whose chief beauty lies in his ugliness, is one of the oldest toy dogs known to civilization; we have evidence of this in the bronzes, ivories, statuary and embroideries which are in existence, and are known to be over one thousand years old.

He is a charming, intelligent, and affectionate companion, without a doubt, and is the most lovable and sensible of toy dogs; he is full of vivacity and courage, and possesses a remarkable memory, for it is a fact that after an absence of years, he will recognize and welcome a former owner. Besides these qualities the Pekin-



A splendid example of the parti-colored Pekingese, true to type—Ty Tou, belonging to Mr. R. H. Hunt

gese is a good little sportsman, he will chase a rabbit across country, and is able to hunt like a drag hound.

He never barks unnecessarily, but no stranger can approach without his giving you due warning; he is utterly without fear and is brave to the point of recklessness.

No praise can be too high for the stamina of these dogs, for without a doubt there are few hardier breeds. Peking, their home, is one of the hottest and coldest of places, so they very naturally adapt themselves to most climates. They are very easily raised and generally thrive well on a diet of bread and meat, and cereals; the bread should be baked or kiln dried. Shredded wheat is also an excellent food, mixed with either a little meat, or moistened with gravy. The dogs drink a great deal of water, which should always be within reach.

There is no mistaking the true Pekingese, he exists, and has existed, in the same shape as now, for certainly 1,000 years and probably very much longer.

A characteristic description would mention his broad flat skull, large lustrous eyes set well apart, broad nose (the flatter the better, and it is most essential it should be black) deep wide black muzzle heavily wrinkled, short bowed forelegs



BIRCH stained mahogany and given a rubbed varnish surface provides an excellent setting for the richest furnishings.

Do you realize that the color and finish given the wood trim in a house is far more important to the beauty of the finished room than is the quality of the wood itself? Poplar, white wood, yellow pine, Washington fir, Oregon pine or any indigenous wood which is locally inexpensive and holds well may be used for the standing woodwork of the interior. Only the best quality of stain, varnish or enamel should be employed.

TO secure lasting and beautiful color and surface, use materials made by Murphy Varnish Company. You will be entirely satisfied with the results.

If you desire advice upon the color treatment and furnishing of your house the Department of Decoration of Murphy Varnish Company will supply you with this without charge. Sample panels of wood showing stain, finish or enamel together with samples of wall covering, drapery materials, tiles and cuts of lighting fixtures, furniture and rugs are also sent if requested.

Write today and send plans.

Address Department of Decoration

Murphy Varnish Company
345 Fifth Avenue New York

heavily feathered, gorgeous coat, lion-like mane, with a lion-shaped body, wide chest and tapering waist, his magnificent plume carried majestically over his loins, and his dainty little "waddle"—a carriage characteristically his own. These features stamp him at once as a true aristocrat of the canine race; "the lion dog of China."

One of the dog's great beauties is his multiplicity of colors. There are all shades of red, from the deep mahogany to the light golden red, black, white, biscuit, cream, brindle, fawn, sable, and part-colors; the latter being at present the most sought after and highly prized in England. The historical side of the Pekingese is extremely interesting. The first specimens to arrive in England were looted from the summer palace at Pekin in 1860 during the Boxer insurrection; five of these dogs were found in the apartment of the Emperor's aunt, who



Ah Cum and Mimosa—among the founders of the breed in England—were smuggled from the Imperial palace

committed suicide on the approach of the troops. The little specimen Schlorff, taken by Lord John Hay and given to the then Duchess of Wellington, lived to the age of 18 years. He was bronze and brown in color, with a black muzzle, and a magnificent coat. He was undoubtedly a sleeve specimen and weighed from 4½ to 5 lbs. General Dunne secured one of the five, which he presented to Queen Victoria. It was so small as to sleep curled up in a forage cap. The portrait of this little dog painted for the Queen by Landseer is said to be at Windsor Castle now. Later on in 1890 Miss Loftus Allen imported Pekin Peter, and in 1896 she imported the two first black Pekingese into England. In 1896 Mr. T. Douglas Murray imported Ah-Cum and Mimosa. It is interesting to know how these dogs left the palace. In the June number of the "Kennel" (English) Mr. T. Douglas Murray says: "Ah-Cum and Mimosa, the two little celebrities among the founders of the breed in England, were acquired with great difficulty, and only obtained by being smuggled out of the Imperial palace hidden in a box in the fodder for some Chinese deer. Their ages, as with all imported dogs, remains guesswork, Ah-Cum being presumably about a year old, and Mimosa, somewhat younger. Their

(Continued on page 207)



When you select a bookcase that combines the features of convenience, beauty and protection of books, you will decide upon one of the many styles in

Globe-Wernicke Bookcases

Rare editions and delicate bindings—as well as valuable books of all kinds should be stored in their dust-proof non-collapsible units, because in case of fire each unit can be quickly removed to a place of safety with their contents intact.

Globe-Wernicke Units are made in many different styles and finishes to harmonize with appropriate interiors.

Carried in stock by nearly 1,500 agents, but where not represented we ship on approval, freight paid.

Complete catalog, illustrated in colors, and a copy of "The Blue Book of Fiction" by Hamilton W. Mabie, containing lists of the world's best stories published in English, mailed on request.

Address Dept. H.G.

The Globe-Wernicke Co., Cincinnati

Branch Stores: New York, 240-252 Broadway
Philadelphia, 1012-1014 Chestnut St.
Boston 91-93 Federal Street Chicago, 231-235 So. Wabash Ave.
Washington, 1218-1220 F St. N.W.

My BOOKLET on Oriental Rugs Free on Request

I would like to acquaint every rug lover with my hobby—the buying of Antique Oriental Rugs of real quality and selling them to other rug lovers at fair prices. My 15 years' experience studying and buying rugs has been so interesting that I want others to know about *REAL* Oriental Rug values—I ship rugs on approval, pay charges both ways, and have no other aim than to give satisfaction. Write today.

L. B. LAWTON, Major U. S. A., Retired
100 Cayuga Street :: Seneca Falls, N. Y.



"Silver Lake A"

Braided Sash-Cord
(Name stamped on every foot)

Have your architect specify it to his plan. It won't cost you any more, but will save you loads of trouble. It is solid-braided of cotton, not waste; can't stretch and is non-inflammable. When the windows are being put in, or when you have to renew the other cord look to see that Silver Lake A Sash-Cord is used. Silver Lake has been the accepted standard in U.S. Government braided cord specifications for 40 years.

SILVER LAKE COMPANY
87 Chauncy St. Boston, Mass.

Makers of Silver Lake Solid-Braided Clothes Lines





POULTRY DEPARTMENT

The purpose of this department is to give advice to those interested in poultry. The manager will gladly answer any troublesome questions. Address "Poultry Department" and enclose a self-addressed envelope.



DON'T BUILD

A \$40.00 HOUSE



Potter Portable Poultry Houses Style "A" 5-8x10 foot house, complete with 8-foot Potter outfit, \$40. Many other styles and sizes.

Mailed for two red stamps to cover postage. Write today and be convinced that Potter Poultry Products are for particular poultry people. We also make portable auto houses. Catalogue mailed on request.

Potter & Company, Box 77, Downers Grove, Illinois

You can buy better, cheaper, more complete ready (factory) made hen-houses, roosting and nesting fixtures, coops, etc., from Potter & Co., because they have been making these goods for ten years and know how.

Complete : Convenient : Sanitary

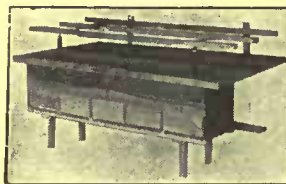
Potter Portable Houses and Fixtures have these good points, as thousands of users testify. Potter goods are At in quality and low in price. They are made for a purpose and save you time and labor in your poultry work.

Satisfaction Guaranteed

when you buy our goods. They are made right and do please our customers. No lice and mites when you use our vermin-proof roofs and nests. For your own pleasure and profit and for the sake of your hens, you cannot afford to be without Potter fixtures.

OUR TWO CATALOGUES—(136 pages, 150 illustrations) on portable houses and coops, fixtures, feed hoppers, trap nests, feeds and supplies of all kinds at lowest prices, will interest you. Mailed for two red stamps to cover postage. Write today and be convinced that Potter Poultry Products are for particular poultry people. We also make portable auto houses. Catalogue mailed on request.

A \$5 Hennerly Outfit



No. 16, 5-foot two-perch Potter outfit, price \$5. Made in 12 sizes.

RABBITS AND PET STOCK

Unrivalled Flemish, Giant, Angora, Tan and Polish Rabbits—Peruvian and Smooth Cavies for fancy or pets. Some Good Youngsters now for sale, \$1.00 up

ELM COVE RABBITRY, Great Neck, L. I.

Baby Chicks of Quality

Sent by Express Direct to You

Why bother with eggs? I can supply you with healthy young chicks at once and guarantee them to reach you in good condition. Fishel Strain White Plymouth Rocks, S. C. R. I. Reds. Prices reasonable.

Chick Catalogue Free.

R. C. CALDWELL, Box 1030, Lyndon, Ross County, Ohio

EXPERT ASSISTANCE IN THE Selection of a Home

A UNIQUE SERVICE ESTABLISHED BY

TOWN & COUNTRY

Send ten cents for a copy of the Country Home Number containing the Country Home Information Blank.

JOHN H. LIVINGSTON, JR.

TOWN & COUNTRY 389 Fifth Avenue

The New Berry—Giant Himalaya

VINE grows 40 feet a year unless trimmed. Hardy as an oak—will stand the winters in any part of the country. Bears enormous crops of rich black berries—ten tons have been gathered from 500 plants. Berries nearly an inch long; sweet, melting, delicious.

Plants ready September 1st. 10 cents each; \$1 a dozen; \$3 per hundred; \$25 a thousand. Add 10 per cent when wanted by mail.

Send for BERRYDALE BERRY BOOK. Tells about other valuable berries for home and market. BERRYDALE EXPERIMENT GARDENS, House Avenue, Holland, Mich.



Maplecroft Rhode Island Reds

win at all the leading shows. "It pays to buy the best." Stock and Eggs for sale in large quantities. Send for Circular and Mating List of S. C. Reds. J. G. Dutcher, Prop. Address Maplecroft Farms. Pawling. New York

G. D. TILLEY

Naturalist

Rare Land and Water Birds

Swans, Geese, Ducks, Peafowl, Cranes, Pheasants, etc. I am the oldest established and largest exclusive dealer in ornamental birds in America.

G. D. TILLEY, Naturalist
DARIEN, CONNECTICUT



White Orpingtons

They lay like slot machines. My birds have won at Madison Square, Pittsburg, Cleveland, Buffalo, Chicago and other large shows. New catalog free.

Lawrence Jackson

Haysville, Allegheny Co., Pa.

WARD'S RHODE ISLAND REDS

A strain of extra heavy layers. A few choice trios of breeding stock at \$10. Breeding pens of four pullets and male for \$15. Show birds a matter of correspondence.

LAKEMONT POULTRY YARDS,

Winter Park, Florida



ONE OF THE SIGHTS IN OUR PARK

We carry the largest stock in America of ornamental birds and animals. Nearly 60 acres of land entirely devoted to our business.

Beautiful Swans, Fancy Pheasants, Peafowl, Cranes, Storks, Flamingoes, Ostriches, Ornamental Ducks and Geese, etc., for private parks and fanciers. Also Hungarian Partridges, Pheasants, Quail, Wild Ducks and Geese, Deer, Rabbits, etc., for stocking preserves. Good healthy stock at right prices.

Write us what you want.

WENZ & MACKENSEN

Proprietors of Pennsylvania Pheasantry and Gama Park

Dept. "H. G." Bucks County, Yardly, Pa.



THE SUCCESSFUL HATCH MUST BE WELL BROODED

A necessary adjunct of the Hall Mammoth Incubator is the Hall Brooder System. The Hall Brooder System is absolutely the last word in brooder perfection. After incubation, the growth, yea, the very life of the chicks, depends—as every breeder of poultry knows—upon how well they are started. The Hall Brooder System was conceived with the two-fold idea of duplicating natural conditions on a large scale, coupled with a minimum of labor and expense. The Hall Brooder System is simple in design but scientifically perfect. The experience of the largest and most widely-known poultrymen in this country proves its ability to raise vigorous and profitable early layers.

The Hall Brooder System is the result of experiments by a poultryman first and inventor last. Each and every part of the Hall System is built exactly as experience has shown to be the best.

Write Today for Our Catalogue, "Fact and Argument."

The most comprehensive book ever issued on the subject, containing many photographic views of famous poultry plants. It's free. It explains WHY the Hall Mammoth Incubator hatches more eggs and stronger, more livable chicks; why the Hall Brooder System raises more and better chicks; why the Hall System lowers fuel and labor expense. Let us prove these statements.

THE HALL MAMMOTH INCUBATOR CO.

UTICA, NEW YORK

The above view is of the Brooder House on Fair Oaks Farm, Darico, Conn., with a 5,000 chick capacity Hall Mammoth Brooder

(Continued from page 205)

names appear in the pedigrees of almost every well known dog now on the show bench. Ah-Cum was throughout his short life acknowledged as the most typically perfect Pekingese spaniel in England. He was the first winner of a Pekingese championship at the Crystal Palace. As the most beautiful dog known to us, both in shape and color, he has been set up at the Natural History Museum, South Kensington, London, where he may now be seen. Ah-Cum died in 1905, and little Mimosa in 1910."

On the question of size Lady Algernon Gordon Lennox says: "The Pekingese is essentially a lady's pet dog, and as such they should be small enough to be easily handled; at the same time, bone and substance should not be sacrificed, and with a maximum weight of 10 lbs. the Pekin Palace Dog Association (England) has thought it advisable to fix a minimum of 5 lbs., in order to prevent a possible 'weediness' in type; it would therefore seem that about 6 to 7 lbs. is the ideal weight, and when the dog is true to type as regards bone, he will generally appear to the eye considerably smaller." A. G.

Three Poultry Fallacies

POULTRYMEN on the Pacific coast are trying to persuade the general public that eggs with brown shells contain just as much nutriment as those with white shells. This color of eggs is a popular superstition in several parts of the country. New York City has the same predilection for white eggs that exists in Los Angeles and San Francisco. Boston, on the other hand, pays a premium for brown eggs. All this makes trouble for the poultryman, for it is the nature of the brown-laying kind to sit, while the white layers do not sit and are not as good table fowls. And what is the difference in the eggs? There is no difference; none whatever. One egg is just as rich and as well flavored as the other. These things do not depend upon the color of the egg shells, but upon the feeding of the hen.

Another fallacy is to the effect that fat hens will not lay. One hears this doctrine preached everywhere. It is all wrong. An old fat hen may not lay, but a fat pullet lays more eggs than a pullet which is poor in flesh. It may be accepted as a fact that the danger of feeding a pullet so much that she will stop laying, is not very great.

Along with this second fallacy goes another, which reasons that corn is fattening, and so corn should not be fed. And yet corn is the best all-round grain which the poultry keeper can obtain. Repeated experiments on practical plants have shown this to be a fact. Not, of course, that corn should be fed exclusively; other grains in variety, as well as beef scraps and vegetables, are needed. The amateur will not go far wrong, however, if he makes cracked corn half the grain ration, in winter at least; and if he supplies an abundance of beef scraps or meat in some other form, along with alfalfa, clover or garden vegetables, he will get eggs. E. I. F.



HICKS TREES—A COMPARISON

TWO suburban homes—one, an attractive, snug, inviting home; one that is a harmonious part of the grounds because of fine big trees and right use of shrubs—The other is bald, severe, just a house—nothing to distinguish it from hundreds of others. Which is your kind? A goodly sized maple, and a few shrubs will make a new house and grounds, at once interesting and attractive.

Hicks has trees of any size, but principally the larger ones. It pays to buy them large, for then you get immediate results—no years of waiting for them to grow up. Of course, they cost more than small trees—but they promptly add double their value to your property. They are an investment.



We planted the tree shown above, three years ago. It now has heavy foliage and is growing at the normal rate.

We have 500 similar maples 15 to 30 years old in our nursery, we can safely ship them to you by rail.

We also have the kind of shrubs you want, at from \$1.50 to \$5.00 for 10.

Send for shrub price list, and for our tree catalog and see for yourself some of the unusual things we have done.

If there are trees in your vicinity you wish were on your grounds, we can move them for you. Let us tell you about our method of moving big trees, and why Hicks large trees thrive. Now is the time to plant trees—don't wait till spring, that is a common mistake

ISAAC HICKS & SON

Westbury, Long Island.

SUN DIALS

Any Latitude

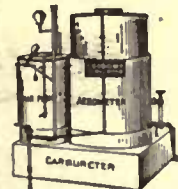
E. B. MEYROWITZ, 101 East 23d St., New York
Branches: New York, Minneapolis, St. Paul, London, Paris

A Beautiful Illustrated Booklet, "WHERE SUN DIALS ARE MADE," sent upon request. Estimates furnished.

H. T. DEMPSTER CARRARA, ITALY

Maker and Importer of **Statuary and Decorative Marbles**
Designer and Finisher of **Italian Gardens**
NEW YORK OFFICE, 39 EAST FORTY-SECOND ST.
CARRARA MARBLE

DON'T COOK THE COOK USE



"ECONOMY GAS"
For Cooking, Water Heating, and Laundry work, also for Lighting.

"It makes the house a home"
Send stamp today for "Economy Way"

Economy Gas Machine Co.
ROCHESTER, N. Y.

"Economy" Gas is automatic, Sanitary and Not Poisonous



BEAUTIFUL TERRACES
and lawns owe their soft, grassy beauty to

KALAKA The Wizard Lawn Producer

Sown like other grass seed but it comes up where all others fail. Kalaka is seed and fertilizer mixed. Needs only soil-moisture. A marvel for bringing up new lawns and terraces or replenishing old ones. Cheaper, goes further than common seed. Instructive booklet, "How to Make a Lawn" is free. Send for it.

The Kalaka Company, 816 Exchange Ave., Chicago.

PROTECT Your floors and floor coverings from injury. Also beautify your furniture by using Glass Onward Sliding Furniture and Piano Shoes in place of casters. Made in 110 styles and sizes. If your dealer will not supply you Write us—**Onward Mfg. Co.** Menasha, Wisconsin, U. S. A. Canadian Factory, Berlin, Ont.



HORSFORD'S HARDY PLANTS FOR COLD WEATHER

are ready to transplant before the Southern grown stock is ripe. The shorter season ripens off stock earlier and autumn planting begins in August. Shrubs and trees that are not ripe to set before November from the South, are ready in Vermont by the middle of October. You may set your Paeonias and many other herbaceous plants from the middle of August to the middle of September and get quicker results. Horsford's Autumn Supplement offers many inducements to buyers of home-grown lilies, tulips, daffodils, crocuses, trilliums, etc., which are set in autumn. If you could see his various kinds of stock as it is here in the nursery, you would understand why his plants have so good a reputation. Reside, he knows how to pack them so they reach you alive and fresh. Ask for catalogues.


Fred'k H. Horsford

Charlotte, Vt.

SARGENT

Hardware

is used throughout many of the most notable public buildings in this country.



Experienced architects and owners know its solid worth. They appreciate the beauty and distinction of Sargent designs. They realize that Sargent quality means long, satisfactory wear and the saving of repair bills.

Whether you propose building a great office structure, a magnificent residence or a modest cottage, it is well worth while to understand the advantages of Sargent Hardware. Sargent designs include styles to harmonize truly with every period and school of architecture. Let us send you a complimentary copy of the

Sargent Book of Designs

It contains illustrations and descriptions of a great variety of patterns, also much other information that is valuable to anyone who builds. Our Colonial Book will be included if you mention an interest in that period.

SARGENT & COMPANY, 142 Leonard Street, New York

Sargent Locks are Famed for Security

CONTENTS

OCTOBER - 1911

COVER DESIGN: THE ENTRANCE TO THE HOME OF ERNEST F. GUILBERT,
ARCHITECT, FOREST HILL, N. J.

From a photograph by H. H. S.

CONTENTS DESIGN: INDIAN SUMMER DAYS

Photograph by H. H. S.

FRONTISPICE: THE FOUNTAIN ON THE ESTATE OF MR. JOHN D.
ROCKEFELLER

Photograph by Alice Boughton

PUTTING ON THE WINTER GARB INDOORS.....	211
<i>By Hettie Rhoda Meade</i>	
THE LAST WORD OF SPRING-BLOOMING BULBS.....	215
<i>By Chester Jay Hunt</i>	
A SHADED TULIP BORDER.....	217
<i>By Zulma De L. Steele</i>	
THE NEW WALL PAPERS.....	218
<i>By Lydia LeBaron Walker</i>	
THE TWELVE BEST PERENNIALS TO PLANT NOW.....	221
<i>By H. S. Adams</i>	
ANNUALS THAT DO BETTER WHEN FALL SOWN.....	224
<i>By E. O. Calvene</i>	
HOW TO MEASURE YOUR OWN GARDEN AREA.....	225
<i>By Arthur W. Dean</i>	
FURNISHING AND DECORATING THE NURSERY.....	226
<i>By Sarah Leyburn Coc</i>	
RESTORING OLD SHRUBS TO VIGOR.....	228
<i>By Grace Tabor</i>	
TWELVE GARDEN EFFECTS WORTHY OF EMULATION.....	230
WHAT VARNISHES REALLY ARE.....	232
<i>By Katharine Newbold Birdsall</i>	
THE FALL CLEAN-UP IN FLOWER AND VEGETABLE GARDEN.....	232
<i>By F. F. Rockwell</i>	
PLANTING THE HOUSE BORDER.....	236
<i>By Warren J. Chandler</i>	
WHAT CAN BE DONE IN FINISHING INEXPENSIVE WOODS.....	238
<i>By Louise Shrimpton</i>	
THE HOME OF EDWARD T. HAPGOOD, ARCHITECT, HARTFORD, CONN..	240
INSIDE THE HOUSE.....	242
A Handy Icebox	A Folding Desk
Lightening the Housewife's Burden	
GARDEN SUGGESTIONS AND QUERIES.....	244
How to Take Cuttings	A Persistent Dahlia
Save Part of the Flower Garden	
EDITORIAL PAGE	246
The Pekingese Dog	Three Poultry Fallacies

VOLUME XX. NUMBER 4.

Copyright, 1911, by McBride, Nost & Co.

HENRY H. SAYLOR, EDITOR.

McBRIDE, NAST & CO.

449 FOURTH AVENUE,

NEW YORK CITY

Robert M. McBride, President; Condé Nast, Vice-President; Robert F. MacClelland, Secretary; Henry H. Saylor, Treasurer. Published Monthly. 25 cents per Copy.
\$3.00 per Year. For Foreign Postage, add \$1.00; Canadian, 50c. Entered as Second-class matter at the Post-office, New York, N. Y.



A MONOLITHIC FOUNTAIN BASIN ON MR. JOHN D. ROCKEFELLER'S ESTATE AT POCANTICO HILLS, N. Y.
William Welles Bosworth, landscape architect



Putting on the Winter Garb Indoors

THE WHOLE PROPOSITION OF REFURNISHING FOR THE FALL AND WINTER—WHAT THE SEASON OFFERS IN ARTISTIC STYLES OF FURNITURE, CARPETS AND DRAPERIES FOR ALL CLASSES OF HOME

BY HETTIE RHODA MEAD

Photographs by Floyd Baker, F. W. Martin and others

WITH the fall months come many duties in house and garden. It is the time when one's home inside the house, and without, must be prepared for the winter. The fall clean-up of the grounds and gardens must be succeeded by a thorough renovation of the house. During the spring and summer months our work and our activities have kept us much outdoors; now, for another six months, our activities will be mostly confined to our homes. So the needs of the winter call for an entirely different setting. It is now time to take down the delicate muslin and cretonne hangings, to put away light willow and cane furniture, and to roll up the cool rugs of woven grass and straw and light ingrain.

The birds are flying southward and the butterflies have long since disappeared from our garden that was so lately bloom-laden. So our cretonnes, chintzs and muslins, which represented the life of the early spring and summer, are no longer appropriate. Where we had draperies, rugs and furniture designed to give the home all the appearance of coolness and lightness that was possible, we must now change our furnishings to colors and forms that will suggest warmth and coziness and protection from the cold and inclemency of the weather without.

Nature will give us all the suggestions we need as to color. We remember the delicate shades and colors of the wood anemones; they have given place in our garden to the stately dahlia with its deep tones of wine red and maroon, the rich golds and maroons of the marigold. Zinnias, with their wealth of color, now bloom in the garden, and the green foliage has now deepened



The comfortable and inviting wing chairs are becoming more appreciated. The day of the chair that is built for appearances only is past

into the various hues of autumn. We may well choose the colorings for our winter surroundings from the palette Nature now lays before us. The transition without makes necessary a transition within.

The fall clean-up of the house to some of us suggests pandemonium, but, if we go about it methodically and with a definite idea of what we wish the result to be, the process, instead of being work and drudgery, will result in play and pleasure.

Most modern houses and well-preserved houses of an older period have splendid attic and store room and dry cellars. In the clean, dry cellars much of the strictly summer furniture may be stored after brushing it carefully and covering it with sheets of unbleached muslin. The summer rugs may be rolled on long poles which may be purchased for that purpose. An outer wrapping of newspaper must be tightly tied around them and they may be disposed of in the attic. Curtains and bedspreads must not be put away dust-laden or soiled. All the draperies which permit of laundering must be

carefully washed without starch and put away rough-dry. Curtains for each room may be folded and tied into packages. One may have sheets of black silesia, sateen, paper muslin, or any inexpensive material to wrap the curtains in; or one may make the material into bags. The sheets will be just as convenient to use and much less trouble to make. Each package should be labeled "Library," "Dining-room," "East Guest Room," "South Guest Room," etc. This will save much confusion in the spring when we are again taking out the summer hangings.

Cretonnes and light silks, which have been used for overdra-



Many dining-room suites show the influence of Chippendale's Chinese manner, as evidenced in this well-made buffet

peries, if they do not permit of laundering, should be thoroughly brushed, and disposed of in the same manner. The black wrappings will, beside keeping the curtains clean, prevent them from becoming yellow, and protect them from any further change of color than they have suffered from exposure to the sun during the summer.

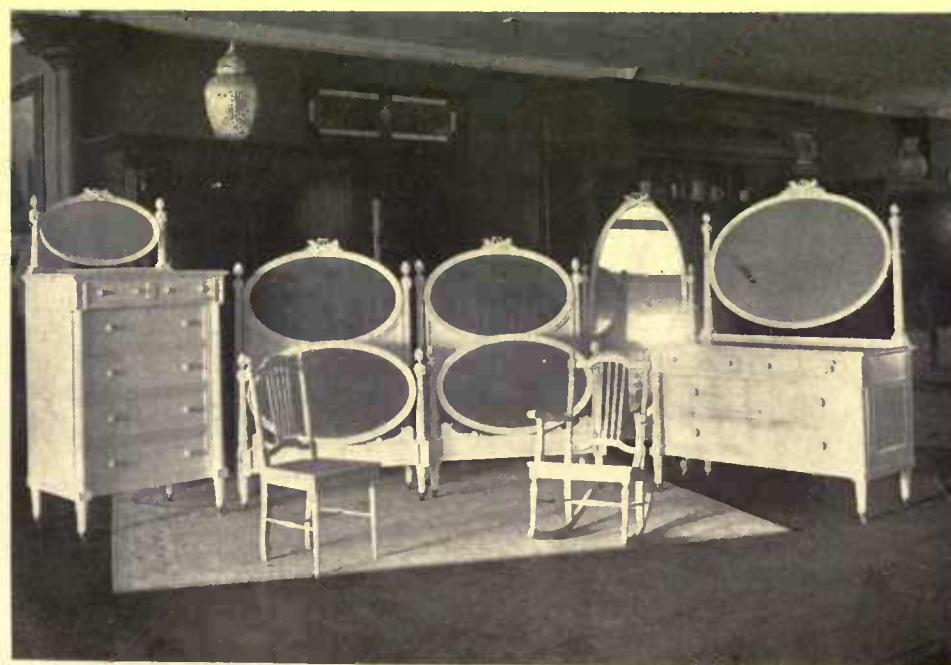
Everyone has not the imaginative power to go into a dismantled room, or entirely bare house, and picture it in his or her mind completed. With this gift of seeing the end from the beginning, at least in things material, if a careful survey of the whole house is made, planning the color scheme, furniture and arrangement one room at a time, a mental picture of the whole house completed will result. When one has this mental picture to follow, it is like having a set of working drawings to the mechanic. Each step is clearly before one in the essentials of the case. The detail will take care of itself, when the setting has been prepared.

Ceilings, walls, woodwork and floors must first be considered. There is an almost endless variety of charming wall treatments. The canvas now being

used is most beautiful and most satisfactory. Some of the decorators give the wall a very beautiful effect by laying aluminum paint upon the canvas. Over this the paint is put, mottling the color until the various tones used are harmoniously blended. The aluminum undercoat gives a luminous appearance to the wall. When the canvas is merely painted, the effect is dull. Light colored or rich wall effects may be had, rough or smooth canvas may be used, or the treatment of the wall may be a mottled plain tone, or a design giving the effect of old velvet may be stencilled upon the prepared canvas. Another very handsome wall covering for living-room, hall, dining-room or library, is a very heavy grass cloth called Orimona grass cloth. For years we have had the light-weight grass cloth imported from Japan; the Orimona grass cloth is something new and much handsomer, and is also much more expensive than the lighter quality of grass cloth known to everybody. It is made of many grasses, bunched together and interwoven with a double thread. Orimona grass cloth is made in



The so-called Mission or craftsman furniture, of simple sturdy lines and soft brown tones, continues to be the only suitable furniture for some rooms



A bedroom set of the season in white enamel. The design is freely modern, but is based on the work of Robert Adam and Thomas Sheraton

a number of excellent colorings—soft browns, tans and greens.

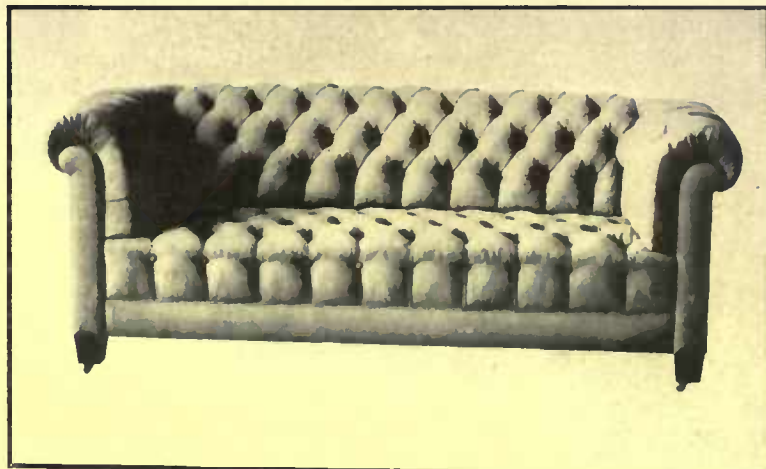
There are innumerable new and original ways of treating the walls of your rooms, beside the well-known silk hangings and papers. If one wishes something unusual for the treatment of the walls, there are endless suggestions which will be furnished by the up-to-date decorator. [Other hints are given on page 218 of this issue.]

Much of the woodwork in the new house is finished in antique ivory, gold, white or gray. This antique finish is much softer and more harmonious than a hard plain color.

The architect of today is giving especial attention to the large living-room. Hardly a house of small or large cost is planned without one room of very ample proportions. This large livable room is the room above all others where solid comfort is going to be enjoyed. It seems best in planning the living-room to follow no particular period. Walls and floor covering, woodwork and ceiling having been chosen of some soft rich tone, chairs and divans of American or English make of generous propor-

tions are more inviting than some more classic and less comfortable furnishing would be. Nearly every American family has some heirlooms, old pieces of mahogany, or family portraits that most appropriately fit into this nondescript room. When I say nondescript I do not mean that there is no relation of one thing to another. There must be the most perfect relation of color as a background where the beloved objects, rich in the associations of the past, or long-hunted-for and much-prized objects of art, may be shown to the best advantage. The new pieces that are introduced into this room must be chosen to correspond with the old.

Wing chairs in many luxurious shapes are much in vogue today, and they invite to comfort and conversation on a cold winter's evening. One may buy them in a number of models, covered with tapestry or velvet, if for living-room or library; or cretonne, linen tapestry, or dainty silk damask if for a bedroom. Some of the new upholstered chairs are made with a removable cushion and seat allowing of a very thorough cleaning. They are called sani-



There is a pronounced tendency to return to the roomy, luxuriously upholstered seats and couches of the last generation



Almost all the rugs and carpets being shown this fall have a very small pattern, such as in this Oriental, or else are in plain colors

tary chairs. Tapestries are largely taking the place of velours and velvets for the coverings of furniture.

Almost all the rugs and carpets being shown for the fall and winter furnishings have a very small pattern or are entirely plain. Handsome French Wilton rugs and also domestic Wiltons are manufactured in plain colors with a border of two deeper tones. A very handsome double-faced Smyrna rug is also made in a variety of soft colors. Either of these weaves can be made to order in just the color one wishes to employ in one's color scheme at a slightly greater cost.

Most of our waking hours may be spent in the living-room, but a good third of our lives is spent in the bedrooms. These rooms, therefore, deserve most careful attention. Furniture for bedrooms is largely of the Sheraton and Adam styles, with panels of caning introduced. Circassian walnut is the popular wood of the moment. Though one sees articles supposedly made of Circassian walnut at comparatively low prices, these low-priced sets are made of gumwood or hazelwood. Genuine Circassian walnut is high-priced. This popular wood is

made up in bedroom sets of various styles with cane panels. The soft browns of the wood are most beautiful, and can well be introduced into very beautiful color schemes where tans, yellows and brown are used. A blue, also, is most harmonious with this soft, gray-brown wood. Many bedroom sets are enamelled, and there is nothing prettier than these pieces of furniture of exquisite proportions in the softest shades of French gray, delicate yellow, and tan, and white. Some of the gray enamel sets have a trimming of white and charming designs of morning-glories in soft violets painted in medallion-shaped forms. The walls may have either gray or violet covering, the woodwork should be white, a rug of plain gray or violet may be used, and there are innumerable soft hangings of silk in violet tones that are like the gray-violet bloom of a plum. Another set of bedroom furniture which one of the stores is showing is enamelled in soft yellow. On this set is painted a design of yellow wild roses. What possibilities for a yellow room! Other bedroom sets are painted white or cream and have in medallion shapes the daintiest of designs, festoons of forget-me-



New furniture for the reception room is of the slender Adam or Sheraton type in delicate shades of tan or gray, or in white, with cane panels



Valances for over-curtains are being made plain, rather than plaited, and shaped on a frame

nots tied with pink ribbons or festoons of pink roses tied with blue ribbons. None of these designs is garish nor overpowering.

While many of the bedroom sets are copies of the English Hepplewhite, Sheraton, and Adam or French Louis Quinze and Louis Seize styles; there is also much bedroom furniture of excellent proportion and design that cannot be said to be copied after any period style.

The solid Colonial furniture of our forefathers for dining-room use seems for the present

to be less popular than the more fragile mahogany pieces of Sheraton and Chippendale types, the Sheraton's simplicity of line seeming to have preeminence in favor just at the present time.

This preference for the more fragile type of furniture to the heavier Colonial pieces may have its practical inspiration, due to the conditions imposed by apartment house living. However, one cannot decry the substantial Colonial type for people whose rooms admit of the use of these handsome but more cumbersome pieces of furniture. Copies and modifications of old English models are also much in vogue for dining-room use.

Craftsman furniture continues to be popular. It has many points in its favor. Its straight lines, substantial proportions and soft brown tones make it a desirable style for some types of rooms. Many fabrics and leathers are made in soft tones of brown, which harmonize with the fumed finish of the wood; for the person who is not entirely sure of the blending and harmonizing of colors and the right proportion of lines, craftsman furniture is a very safe style with which to furnish. The housekeeper likes it because it shows the dust very little. One woman told me she had to dust her mahogany set six times a day, so she got a Mission one for it.

The window draperies in vogue call for three sets of curtains. A sash curtain, which reaches only to the sill, inner lace curtains, reaching to the floor, and silk, velvet or tapestry overhangings. The valance, instead of being gathered or plaited, is now plain and shaped on a buckram frame. These valances seem a trifle more formal than the draperies used for some years past, but admit of much handsome ornamentation, or they may be quite plain, having a simple finish of galloons or fringe. Plaited or gathered valances are of course still being used, but the straight valance is employed in the more formal homes and more pretentious house. Fillet and Cluny laces continue to be much used in the more expensive curtains, while soft imported and domestic net, plain or with dainty applique designs, is to be used in the less elaborate homes. Of these nets there are many of charming dainty patterns. The general consensus of opinion is that fabrics, velvets, damasks and tapestries, which will be in general favor this season, are of small designs. Some very handsome velvets of Genoese and Florentine design are also being shown.

Handsome fabrics, such as tapestries, damasks and velvets, are comparatively high-priced, though fortunately for the person of moderate means, there are always good things of moderate price to be found if one but has the patience to look for them and the discrimination to know the good things one sees regardless of what the price may be.

Unfading fabrics have gained much popularity during the past year or two; made of cotton and silk in an almost countless number of weaves and designs of light or heavy weight, there is hardly a room so pretentious that some of the heavier qualities of these Scotch fabrics may not be appropriately used. For the home of moderate cost there are almost endless possibilities. From semi-transparent weaves that may be used as curtains, to very heavy fabrics suitable for portières and upholstery, all are exceedingly effective. Each weave and pattern comes in a number of exceptionally good colors, so

(Continued on page 270)



The inner and outer curtains for a less formal sort of living-room—a room, incidentally, that illustrates the author's idea of a pleasingly nondescript room



For vigorous spring blossoms of narcissus, as well as hyacinths, daffodils and crocuses, the early fall, or as soon as received, is the time to plant

The Last Word On Spring-Blooming Bulbs

THE TESTS TO DETERMINE WHAT BULBS WILL BLOOM—NEW VARIETIES AND STRAINS INTRODUCED FROM HOLLAND—THE BEST TIME TO PLANT TULIPS, DAFFODILS, NARCISSUS AND CROCUSES

BY CHESTER JAY HUNT

Photographs by Chas. Jones and R. R. Raymoth

TOO frequent, indeed, is the gardener's lament that the beds and borders are not what they ought to be. More often than not, the attempt to be relieved of responsibility for this condition brings forth against the seedsman or nurseryman the accusing excuse of poor seeds, weak plants or worthless bulbs. It is irksome to shoulder bravely the results of our own mistakes and confess an ignorance or a carelessness which has undone all the painstaking labor of the grower who has produced a perfectly good plant or bulb for us to mistreat.

Yet, in the case of flowering bulbs, there may sometimes be cause for complaint. Nearly all bulbous plants which flower early in the spring are prepared during the previous year for their daring of delayed frosts; and whether a bulb will flower satisfactorily or not, depends upon the nature of the season of growth, as well as upon a proper ripening after growth has ceased. The former fac-

tor is wholly in the hands of the gods and the weather man; the latter is to some extent under the control of the grower.

If at fall planting time the bulb of a hyacinth, tulip or narcissus be cut through from top to base, the promise of success or failure for the coming spring may readily be determined, for a miniature flower, perfect in all its parts, will be found at the base of the stem. In fact, the bulb itself is but an enlarged development of stem or leaf structure, designed to provide nourishment for an early growth too rapid for the roots alone, and to protect during the winter the flower already formed. After blossoming, the plant sets to work to form a new bulb, which will blossom in its turn if conditions have been suitable for maturing its growth.

It is possible, however, to determine in a great measure from the outward appearance of the bulb whether it is what it should be, without having to be so inquisitive as to spoil our toy by taking it apart to see the wheels



Number the Poeticus varieties among this year's plantings



Basal rot is found among the Holland varieties of *Horsfieldi*, but these from England are generally free from it



The bulbs of the best *Barii* class of narcissus are small

go round. A first-class bulb should be comparatively heavy and quite solid, without a sign of being soft or flabby. A firm pinching of the bulb, both at the base and just below the top, will give evidence of any soft spot, while the selection of a firm, heavy bulb of average size as a standard, and judging others by balancing them in the hand, will give an idea what the bulb should be. A clean, close skin in the case of tulips is desirable, though many sorts among the late tulips form a very thin and delicate skin which easily comes loose. If the skin of a tulip comes off, it will not injure the bulb appreciably unless it is to be out of the ground some time; the skin protection is then a great help in preventing the bulb from drying.

Size is by no means a criterion, for many varieties never make a large bulb, and very often an extra large bulb is a sign of old age and an approaching breaking up. With a discreet knowledge of varieties, the size of a bulb will help a good deal in determining its quality. It is useless to ask for large bulbs of a variety that does not run to size; on the other hand, under-sized bulbs of a sort which should be large means that one is paying for first size or "top root" bulbs and getting only second sized ones. For instance, among hyacinths the blue *Grand Maitre* makes a very large bulb, while *Roi des Belges*, a handsome red, is naturally small. *Crimson King*, *Thomas Moore* and *La Reine* are tulips with small bulbs; *Cottage Maid*, *Keizerkroon* and *Belle Alliance* are examples of sorts with large bulbs. In the narcissi, the trumpet sorts give large bulbs as a rule, while the *Poeticus* type and most of



The favored *L'Immaculee* is now surpassed by *Joost van Vondel*



For best blooms of *Keizerkroon* pick out the large bulbs



Big hyacinth bulbs sometimes produce spikes which are green at the top

the *Barrii* and *Leedsii* class are small. With the daffodils a rather particular knowledge of characteristic size is of great value in purchasing superior bulbs, for the diversity among varieties in the matter of size is rather marked, and whether a bulb throws one flower or three good blooms is frequently an important matter when the bulbs are used for forcing. Even large bulbs of narcissus *Emperor* will often give no more than one flower, and this tendency of different varieties to give few or many flowers ought to be considered before the dealer is blackguarded for furnishing poor bulbs.

For formal bedding, second size bulbs of hyacinths are as satisfactory as the larger ones, provided they are planted a little closer, and where large quantities are used the cost may be reduced in this fashion. The spikes may be a little thinner, but a splendid display of color will be afforded just the same. Big hyacinth bulbs are somewhat inclined to come green at the top of the spike, probably because the truss is too heavy to develop fully.

It is usually easy enough to determine whether a bulb is sound or not. Tulips are sometimes prone to a dry rot which makes brittle, empty cases of the bulbs. A firm pinching pressure will cause such a bulb to collapse between the fingers, but this difficulty is seldom encountered among newly imported bulbs. I have noted it more often among bulbs kept a second year, and the single early tulip *Proserpine* seems most susceptible to it.

Occasionally hyacinths give signs of decay due to disease, but the growers
(Continued on page 272)



Tulips must go into the ground at about the time the leaves of the deciduous trees begin to fall. Early planting often causes loss from spring frost

A Shaded Tulip Border

AN AMATEUR'S SUCCESSFUL EXPERIMENT IN MAKING A GARDEN BEAUTIFUL DESPITE UNFAVORABLE CONDITIONS—A ROW OF TULIPS SHADING FROM ALMOST BLACK TO BRILLIANT YELLOW

BY ZULMA DEL. STEELE

Photographs by the Author and Chas. Jones

EVERY garden, be it large or small, has its own particular problems which must be worked out as individual taste or preference suggests, and adapted to the necessities of location, size and surroundings.

Many decorative effects can be undertaken in the large garden where shrubs and trees form a background, which are quite out of the question in the small suburban garden bounded on three sides by fences.

In our own garden, a plot measuring about thirty-five by eighty feet, in the suburbs of New York City, we find it impossible to have large shrubs, as they shade the space desired for flowers.

Picket fences separate us on either side from our neighbors, and a high close board fence determines the end of the garden. Against this fence in the centre, we have a latticed arbor, with a box-seat six feet long. This was built by a carpenter from our own design. It provides a convenient resting place, and the box-seat is useful for holding the spade and fork and other garden tools. Rambler roses and clematis paniculata form a thick leafy canopy overhead and give a bit of welcome shade when the sun is hot. The arbor is stained in dull green and the back of the seat bears the following legend painted in dark letters on the green background:

"A World of Peace shut in.
A World of Strife shut out."

The borders are laid out in curved lines, starting at each end of the arbor and continuing around the garden.

As this little plot is the work of our own hands, we have solved some problems, made some discoveries and tried some experiments, which may be interesting to other garden lovers.

The question of tulips puzzled us not a little. All the garden magazines and books said "Plant your tulips in clumps against shrubbery," but we had no shrubs, and we could not afford to give the space to large groups or masses of the Darwins where they could lie undisturbed from year to year.

Finally one of us exclaimed, "Why not have a tulip border close to the lawn, where the bulbs would not interfere with later planting, and our sweet alyssum border could be planted right over them?"

This having been agreed upon, the next thing to be considered was the color. A border of one color would be monotonous, even if we could agree upon a color; and a mixed, unnamed border was

too dangerous an experiment to consider, with the risk of seeing scarlets and pinks in deadly warfare.

Finally light dawned, and order resolved itself out of our chaos. A shaded border it should be, for which we could select and arrange the colors. Many delightful hours were spent in studying catalogues and reading descriptions of colors and shades.

We decided to put in the Darwins, because this variety does better if left undisturbed in the ground from year to year, and also because it is a late blooming tulip, and does not shed its petals, individual flowers often lasting for nearly a month. When necessary to complete our color scheme, we would fill in with the late flowering cottage tulips of the tall varieties, which bloom at the same time as the Darwins.

We decided to begin with the darkest tulips at the end of the garden, starting at the arbor seat and continuing the color, uniformly, down each side of the lawn.

Close to the arbor at each end of the seat, we started with that prince of black tulips, La Tulipe Noire, made famous by Dumas' novel of that name, and said to be the blackest of all tulips, the high lights reflecting deepest maroon.

Then followed the Sultan in maroon-black, and others shading into dark maroon, and then into deep blood-red.

We then began with the darkest cardinal red, shading down through several tones to the most vivid scarlet.

Then to unite our color scheme and connect with the orange tones, we used a scarlet with orange centre, and a vermilion striped with gold, which brought us naturally to the clear orange of Mrs. Moon, followed by the yellows, shading down, through several gradations, to the pale lemon color in Vitellina, which as it grows older changes to creamy white.

Next to this, bringing us to the centre of the garden on either side, and where the curves were fullest, came the whites: Painted Lady, cream white, and next to her the White Queen delicately shaded with pink.

From this point on, our color scheme changed, and leaving our reds and yellows at the other end of the garden, separated by the whites, we began to shade into pale pink, rose, and deep carmine.

This brought us to the end of the side borders, and as we had a little scroll-like terminal bed which ended the border, we planted around that the shades of lavender. (Continued on page 250)



After the tulips are gone sweet alyssum occupies the front of the border in the long line around the garden



A reception room treatment that shows the skill in hanging



The upper section of a panel showing a paper that is produced in various tones of bronze that do not tarnish



There are printed linens to match a frieze or cut-out border

TO the old mural decorators who laboriously traced out their work by hand, we owe the inspiration which today is so splendidly expressed in the finer wall-papers. Putting aside considerations of permanency and looking only at the artistic results, one must concede that there is little loss of beauty and great gain in economy by the modern way. And there is practically no limit to the range of these modern wall-paper creations. They are architectural; they are pastoral and scenic; they are historic, periodic and national; and they are skillfully imitative of leathers, fabrics and even metals and ceramics. One can choose between the unconventionality of Nature itself or the strict precision of monastic illumination. Every color and the finest of color is brought to perfection; and even the absence of color, that is to say black, appears in form as pleasing as it is surprising. In a word, one can make his interior walls respond absolutely to his will; and if he cannot live in a palace, his surroundings may be at least palatial. Nor is the expense necessarily in proportion to the richness of the effect; because in the last analysis the achievement depends upon the taste and skill with which papers are selected and applied.

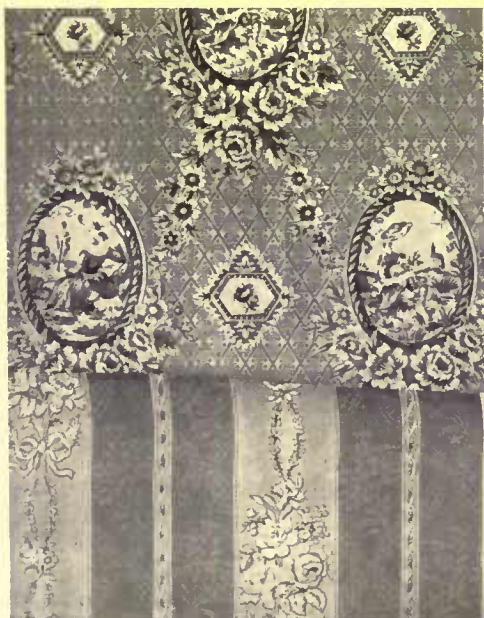
Reference has been made to the black papers. These are the great outstanding

BY LYDIA LEBARON WALKER

Photographs of rooms by courtesy of the paper manufacturers

novelties. The black is used as a body or background to the design, as white has been used heretofore. The superimposed pattern imparts the necessary glow of color and light. The figure shines out something like a diamond on a black gown. Further light is imparted by the use of such papers in panels, where the surrounding treatment can be as bright as desired. And bright draperies are essential in all cases. Of the three examples shown, one presents an interesting Chinese Chippendale pattern; another a soft-toned tapestry; while the third created a sensation at the recent wall-paper exhibit at Hamburg, where we understand it received a first prize.

The nations are attractively represented in characteristic designs. Anyone familiar with Portuguese decoration will at once recognize the scroll in the specimen illustrated. Particularly admirable are the graceful perfection of detail and the exquisite coloring. The greens, blues, reds, mauves, browns, etc., are a delight to behold. Special interest attaches to the simple Dutch paper. It bears the name of Queen Wilhelmina, for whom it was first made. The tones adopted by her majesty were Delft blue with miniature roses sprinkled between the stripes, the rose being the national flower. In this country it comes in vari-



Two bedroom papers—a Directoire design in mulberry and white on old blue ground, below which is a Louis XVI pattern



There is something startling about this vigorous Jacobean pattern and its quaint detail. It needs to be carefully handled



The Portuguese paper with its characteristic scroll work and a bedroom paper originally made for Queen Wilhelmina



The tapestry effects are found again this year, and with even more harmonious colorings

ous colors with cretonnes to match. The French touch is easily recognized in the room photographed. It appears in the cut out border especially, with its garlands and ribbons. The French linen to match is one of the most exclusive importations in the country.

The transition from national to periodic papers comes naturally. In this connection nothing could be more striking than the Old English paper in Jacobean style. At first one can hardly repress a smile at the fantastic improvements that the artists of old King James imparted to Nature. Painting the lily or gilding refined gold would present no difficulties to them apparently. Yet it must be admitted that the paper grows on one. You begin by wondering if you like it and conclude by admitting that you do. Certainly it is full of character, and it is what we may call companionable. It is particularly adaptable to bedrooms in houses of Tudor architecture. There are cretonnes to match. The Directoire or Jouy paper also is interesting and typical. The pastoral medallions belong to the few years between the revolution and the Empire when taste had swung away from royalistic embellishments, and when art reflected the simple pleasures of the people. The other French paper is a straight Louis XVI, with the usual Marie Antoinette ribbon. One of the charms of this design is that it is executed in the desirable mulberry tone.

The past season has witnessed a growing feeling toward out-of-door papers.



Above the peacock paper, now found in great variety, is one of the trellis and arbor papers to be used above a simple side wall. It is one of a number of similar outdoor subjects



This short section of a forest frieze gives only a faint idea of its effectiveness

The tree frieze shown at the top of this page is decidedly inexpensive, yet its drawing, perspective and coloring merit praise. The trellis and arbor idea illustrated is very ingeniously produced by a simple side wall and a gorgeous arch-and-rose crown. Birds, especially peacocks, are prominent in the finer decorations.

Of all the new papers the most elegant are the imitations of leather. The appearance and even the "feel" of leather are marvellously approximated. These goods being nothing short of magnificent, their dignity calls for a worthy apartment. They are especially appropriate for handsome halls, libraries, living-rooms and dens. They convey an impression of stability and seasoned age. All the appearances of stained, hair-brushed, hand-tooled and other leather treatments are produced.

The imitative impulse is not confined to leathers, but extends to fabrics; and the success is about as great in the one case as in the other. This is strikingly illustrated in the engraved Japanese burlap paper. Not only the appearance but the actual texture is approximated. Its unique silver finish takes beautiful lights. The greens and mulberry tones in the cut-out border are exquisite. A dainty fabric effect is presented by the rayure or moiré example. It gives the idea of blue and white silk stripe with embroidered baskets. English chintz papers also belong to this class, and are delightful for bedrooms. One of the latest fashion impulses has been toward Paisleys and



The season's most interesting innovation is the black background on which delicate colorings show up far better than on the traditional light background. At the left the tapestry idea is carried out; in the middle a fantastic Chinese Chippendale pattern is seen, while the illustration at the right shows a paper that received first prize in a recent wall paper exhibit in Germany



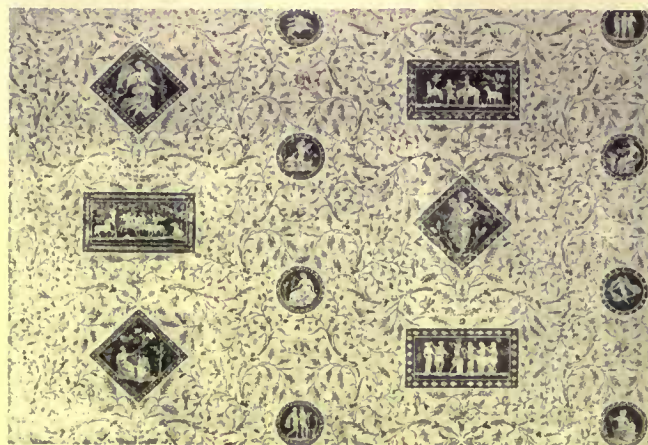
There is a great variety in the fabric effects this year. At the top is a free design after the English chintzes; below it is a dainty moiré; in the lower left corner is a quaint approximation of an old sampler stitch; at the top right is a Paisley binder; a cut-out frieze is provided for the narrow striped side wall paper, and there is cretonne obtainable for the hangings; in the lower corner is a Japanese burlap effect

Cashmeres. This form of decoration is now found even in wall-papers. Paisley hangings also may be had in cretonnes. It strikes a rather pleasing note in a bedroom carried out in the old style, to employ these papers and hangings.

Mention should be made of the paper designed especially for the dining-room. It is of a Wedgewood or ceramic design in Delft colors. The treatment suggested would be to apply it for the lower



Two of the new leather papers. At the left is a frieze of orange branches on a rich green ooze leather background. A clever imitation of brushwork and hand-tooling is simulated at the right



A rather quaint dining-room paper with Wedgewood medallions. The dominating color, of course, is blue, which would be effective in back of real Wedgewood

two-thirds with a plain Delft blue above the white plate-rail. A few pieces of Wedgewood come in very nicely.

The metal-toned papers are somewhat akin to the leather-finished papers, and rank among the very handsomest. To the stained effects of the design are added the sheen of bronze or other metals. There is sufficient life and color, so that the paper is not dependent upon any angle of illumination. The finest of these metal-toned creations has the quality of not tarnishing, which adds to its value and durability. The general uses of papers of this character are similar to those where leather effects are employed.

(Continued on page 255)



So wonderfully has the art of paper making advanced that it is almost impossible to tell even when passing the hand over these walls that they are not made of leather borders and dado richly tooled



There are many arguments in favor of the hardy garden of perennials, not the least of which is that the flowers are more beautiful by remaining undisturbed. Start now and have an established garden next season

The Twelve Best Perennials to Plant Now

SOME OF THE VERY BEST FLOWERS THAT THE AMATEUR SHOULD CONCENTRATE HIS ATTENTION UPON THIS FALL, THAT THE PLANTS MAY BE WELL ESTABLISHED BEFORE SPRING

BY H. S. ADAMS

Photographs by N. R. Graves and Chas. Jones

ONE of the hardest things to "drum" into the head of the average grower of perennials is that when spring ends, the planting season is not over. Far from this being the case, fall offers a boundless, and certainly a most interesting, field of gardening endeavor.

Spring, like time in general, must be taken by the forelock. When it comes to the matter of planting perennials, the only part of the year in which you can do this is fall. The reasons, though so frequently overlooked, are obvious enough. In the first place one of the little axioms of the garden is that the planting that is done in the fall will not have to be done in spring when there is always too much work out-of-doors, no matter what pains have been taken to discount the exigencies of the vernal season. Then, too, perennials planted in the fall have ample time to get a good root growth before winter sets in and thus are firmly established in the garden when spring is at hand, and are able to forge right ahead. If not put into the ground until April or May they have to take time to acclimate themselves. There may be only a brief setback, but now and then the readjustment is so slow a process that a season's bloom is lost. Finally, some of the most beautiful of the perennials flower so early in the season that in their case fall planting is imperative if satisfactory results are wanted the first year—and, of course, they are.

Here then are three unassailable reasons why the amateur

should not rest from his labors in fall; but, on the other hand, should be planting now against spring. All three need to be borne in mind especially by those who are saying to themselves that they are "going to start a hardy garden next year." Start now and when next year comes you will be actually under way.

The word start is used advisedly. In these advanced days of potted perennials, it is possible to start and finish a hardy garden in the fall of the year. Except in the case of young plants from seed or cuttings, however, it is wisest to leave until spring the perennials that come into bloom in October.

Which perennials are the best to plant in the fall? That is about as puzzling and as arbitrary a game as making a list of the best books. All sorts and conditions of tastes must be considered; there are questions of color, weight, form, fragrance and what not, to be taken into account and then there is the seasonal idea—some, for reasons of convenience, prefer a spring, summer or fall garden. Under the circumstances the only thing to do is to strike a sort of average and suggest a list of unquestionably reliable perennials, iron-clad as to hardiness, and offering no cultural difficulties—a list of plants that no one need regret making a permanent investment. Here it is:

<i>Arabis albid</i>	white	April—May
<i>Alyssum saxatile</i>	yellow	" "
<i>Primula veris superba</i>	"	May



If blue is preferred next to arabis nothing is better than *Phlox divaricata*



Boltonias are somewhat like the wild asters. They come in August



Speedwell, or veronica, is worth while for its statelily blue flowers



A more satisfactory perennial than the ordinary *Iris Germanica* would be hard to find. Its blossoms are beautiful both for form and color

<i>Dielytra spectabilis</i>	pink	May
<i>Iris Germanica</i>	yellow, purple	"
<i>Dianthus plumarius</i>	pink, white	June
<i>Delphinium formosum</i>	blue	June—July
<i>Phlox paniculata</i>	pink, white	July—August
<i>Veronica longifolia subsessilis</i>	blue	" "
<i>Gaillardia grandiflora</i>	red and yellow	" "
<i>Lilium speciosum</i>	pink, white	August
<i>Boltonia asteroides</i>	white	August—September.

The plant that heads the list, because of its blooming season, has the common name of rock cress, but is almost invariably called arabis. It is among the most valuable of the early spring perennials and should be in every hardy garden. The little blossoms

begin to appear in April and soon they are so numerous as to form a sheet of white. It is

a plant so low of growth that it should be placed on the edge of the border, and is all the prettier if allowed to sprawl over the garden path, which should be below the level of the bed—a good rule in the case of all the carpeting plants. New growth sets in immediately after the flowering period, and the foliage is presentable all summer. When a plant is three years old it is apt to be rather scraggly; so I prefer to keep a fresh stock going by taking cuttings in June. These cuttings root easily and bloom the next year, making good-sized plants the year following. There are two species sold, *A. albida* and *A. Alpina*, and you may get the one for the other without being any the wiser. The double kind is much handsomer than either and better for cutting, though the effect is less snowy.

Quite as indispensable to the spring garden is the rock madwort, or "basket of gold" *Alyssum saxatile*. It lends to the border a mass of the sunniest shade of yellow—a color always appreciated when the garden year is young. The plants branch freely after the first season's blooming and become quite sprawly, but will last for years if they are on well-drained ground and are not

allowed to get tangled up with a rake. Plant it next to arabis for a charming combination or, if blue is preferred, there is nothing better than *Phlox divaricata*.

I confess that I don't like to single out any hardy primula; I am so fond of them all. But, everything considered, I feel that I must choose the glorified cowslip known as *Primula veris superba*. It is fully entitled to the adjective superb, nothing else doing justice to its trusses of pale yellow blossoms with orange centers. In effect, if not in fact, it is a polyanthus. This is by no means a common perennial. Its hardiness and ease of culture, not to mention its



Alyssum saxatile lends to the border a mass of the sunniest shade of yellow well appreciated in the early spring



The bleeding heart is one of the perennials that do well in partial shade



Larkspur will flourish in any garden, but good rich soil and no disturbance accomplish best results. The blue perennial varieties appear in June



Gaillardia grandiflora is among the showiest of summer blooms



Dianthus plumarius, beside its spicy June bloom, is attractive for its foliage



Lilium speciosum, both pink and white, is one of the most dependable bulbs

that after the second year they should be separated into as many parts as there are crowns. Separate with a sidewise pull in order to avoid tearing the tangled roots.

The old-fashioned bleeding heart (*Dielytra spectabilis*) loses its foliage in midsummer and is dormant in fall. If planted then the shoots will be stronger the first spring. Another point in favor of fall planting is the fact that bleeding heart roots, unless potted, are dug up by nurserymen and stored for the winter, not because they are not hardy, but for the reason that they make such an early start. This causes early sprouting, and as the shoots are very brittle they are apt to break and injure the plant's immediate efficiency. The bleeding heart is one of the perennials that should be let alone for years. It is also one that does well in partial shade. A small plant will have a leaf-spread of more than three feet across in a few years, so it is best to give it plenty of room and utilize the space around it for snowdrops, scilla, chionodoxa, crocus or other early spring bulbs. Don't be discouraged by your first sight of a root of bleeding heart; it looks hopeless, but wonders will come of it with proper care.

A more satisfying perennial than the ordinary *Iris Germanica* would be difficult to find. The blossoms are not only glorious in their color tones, but are exquisitely beautiful in form and give the garden a unique touch as they lift their heads above their sword leaves—which alone are fine enough to commend the German iris to all. Nothing could be easier to grow. Just plant it in ordinary garden soil and if in a few years the rhizomes seem to be too crowded, separate them. One comforting fact about the German iris is that the most ordinary kinds, and therefore the easiest to get, cannot be improved upon. None of the most modern

beauty, recommend it generally, however. The plants bloom freely. They increase so rapidly

varieties, for example, is better than the violet species with purple falls. Nor is any superior to that other old-fashioned flower-de-luce that is so faintly suffused with blue as to take on a sort of pearl color. The latter, I take it, is properly *I. Florentina*, but is generally listed under the head of German iris. Three other admirable varieties are Mrs. H. Darwin, white, the falls veined with maroon; Mme. Chereau, whitish, the edges of the petals feathered with blue, and *I. pallida Dalmatica*, a delicate blue iris of the Germanica type.

Time was when the grass, or June pinks (*Dianthus plumarius*) were in almost every garden; more particularly the double ones, white or pale pink. These two remain the best, though there are other good double ones and no end of single ones. I like them
(Continued on page 255)



The blossoms of the arabis coming in April soon form a carpet of white



Primula veris superba is fully entitled to the adjective superb. It has pale yellow blossoms, with orange centers



Few flowers approach the splendor of color and airiness of petal displayed by the annual poppy



Larkspur seems best in the blue shades and should be massed to secure the most brilliant effects



The colors of the California poppy range from cream through the orange shades to vermillion



Pansies will almost grow themselves, but the best blooms are the rewards of care and attention

Annuals That Do Better When Fall Sown

A POPULAR GROUP OF ANNUAL FLOWERS THAT ARE HARDY ENOUGH TO WEATHER THE WINTER AND COME UP EARLIER AND MORE LUXURIANT IN THE SPRING

BY E. O. CALVENE

Photographs by N. R. Graves and Chas. Jones

IT is just another of the garden's little ironies that we never find out until the warm spring day when the seed is triumphantly borne home and there, on the packet, it stares at us, "for best results and finest bloom, seeds of this should be sown in the fall!" Sometimes, indeed, it has the audacity to say "the *precious* fall" which is surely nothing short of criminal.

Of course the only annuals that will go through the winter are the exceptionally hardy ones, and these must be protected if growth above ground has advanced at all, or else they must be wintered in a cold frame. Some biennials which are usually treated as annuals, and regarded as annuals generally, are also sown in the fall, but even including these the list is not a long one. At least, there are not many that are worth while, although it is likely that one could find fifty things that might be treated this way, if the effort were made and there were any reason for doing so. Only those, however, which are definitely better for fall planting will be considered here. This list contains such examples.

Annual larkspur (*Delphinium Ajacis*), California poppy (*Eschscholzia Californica*), pansies (*Viola tricolor*), annual poppies (*Papaver Rhoeas* and *somniferum*), sweet peas (*Lathyrus odoratus*), pheasant's eye (*Adonis aestivalis*), the so-called Flos Adonis (*Adonis autumnalis*), and catchfly (*Silene*) make up a fairly popular group, which, for one reason or another, should be sown now if they are intended to grace next summer's garden.

Larkspur, whether annual or perennial, is surely one of

the loveliest flowers in the world, and in the blue shades which alone seem typical to me, it is unrivalled by any other annual. There are pinks, buffs, fawn and white for those who want variety, but a mass of the various dazzling blues by themselves is far better than a mixture. Have the other colors, too, if they seem desirable, but the "blue flower"—keep it apart from the rest, in the purity of its radiant sky color.

Annual larkspurs like a cool soil that is moist, and though they may bloom from seed sown in the spring, the seed is so slow in germinating that fall sowing is recommended. Prepare the earth by deep digging and enriching, and sow late. They will not sprout until spring, so protection is unnecessary, other than the light covering of earth that is put over them when they are sown; four times the seed's diameter is the rule for out-of-doors. Thin out the seedlings in the spring, so that they are six inches apart, and as the plants grow, thin them still more, if it seems necessary in order to give each room to develop. They should not stand distinctly apart from each other, but some varieties require more space than others. Just how much room to give each must be determined by their growth; none should ever be crowded. Their height is from one to two feet.

The California poppy is offered in many varieties by seedsmen, the colors ranging from cream or cream white through yellows of many degrees, down to orange and finally to vermillion. All of these are (Continued on page 260)



Catchfly should have its seeds sown early in the fall to produce an abundance of its rosy pink flowers

How to Measure Your Own Garden Area

A SIMPLE DEVICE WHEREBY ONE CAN COMPUTE THE SURFACE OF IRREGULARLY BOUNDED AREAS—THE PLANIMETER, A USEFUL INSTRUMENT IN ESTIMATING THE HOME GROUNDS

BY ARTHUR W. DEAN

THE prospective builder is often desirous of knowing the acreage of his real estate and is in considerable difficulty in finding this out, especially where his land is of irregular boundary. Perhaps a garden surrounded by a wavy path is to be filled with loam, or a large space of lawn sodded. Such a proposition is either regarded as extremely difficult for the laymen to solve, or is given up as utterly hopeless. Among the curious instruments of the architects' craft, however, there is one which renders such problems comparatively simple, and of accurate solution. This is the planimeter. If one is not readily available it is an easy matter to make one from the following illustrations.

All that is necessary to make a planimeter is a decimal rule and stiff, thin cardboard—squared surveyors' paper makes the work still simpler. Take a piece of this cardboard or the surveyors' paper ten inches by five and use it for the calculations.

If we could discover some way of making a measure of varying form so that it might be applied an equal number of times to the area in question, our difficulty would be at an end. But it is possible to construct a figure having such a constant measure of area. In this case it is a rectangle which is capable of infinite variation of base and altitude. This is the planimeter.

The first step in its construction is to lay off a constant rectangle of convenient size. In this example 5" by 1" are the dimensions. Divide this in two by a perpendicular line (the long dotted line of Figure 1), for the two rectangles, 2.5" by 1" (A and B) thus made, are necessary when using the planimeter from a central point. Each of these rectangles then contains 2.5" square inches of area. With the decimal rule mark off tenths of an inch

upon the perpendicular and run lines parallel to the base through these points. Take the point 12/10" above the zero point N (Fig. 1), then plot the width or base of a new rectangle of equivalent area and 12/10" altitude. By simple division we find this to be 2.08" and we let a dot on the first line, 2.08" from the perpendicular, represent the terminus of this new base. Succeeding points will be 1.78", 1.51", 1.39", etc., respectively. Proceeding similarly along the perpendicular at every 1/5" we plot bases of rectangles equivalent to our constant. After 40/10" have

been marked off in this manner the variation in width is found to be so slight that it is only necessary to add 5/10" to the successive altitudes. When the 100/10" point is reached, carefully connect the dots by a curved line. This curve is the hyperbola, and geometry can prove the products of each of these bases and altitudes to be equal.

Simply reduplicate the area bounded by the curve, on the other side of the perpendicular and the whole figure is complete. Since the card is to be used from a centre point some notch is necessary to hold it against the pin, so a little superfluous edge is left and a cut made up to the base line as at N (Fig. 1). Cut out along the lines and the planimeter is ready for use.

Find the approximate centre of the area to be measured and place a pin in the plan at this point. With the base resting on this pin apply the planimeter as shown in Fig. 2, marking a dot where either edge cuts the boundary of the surface to be measured. Slide forward until the back edge touches the last mark and make another dot until the perimeter is divided all around in this manner. If lines were drawn from these marks to the center the plan would contain a number of triangles equal in area—in this case 2.5 square inches. Where the figure has a straight base line the planimeter is moved along it, base to base, and the resultant divisions will be rectangles, therefore, of twice the size of the triangles. In this instance the whole constant area of 5 square inches is used. Simply multiply the number of triangles by 2.5" or the number of rectangles by 5" and you have the desired area.

For illustration let it be supposed that the planimeter has laid

off thirty-four divisions on the perimeter with a remainder approximated to be .4" of the average of the divisions on each side of it. The area of the figure would then be 34.4×2.5 —86 square inches. Assuming that the plan to be plotted is 4 in. to the foot, we must multiply by the scale area or 16, which equals 1326 square feet. In computing Fig. 3 the principle is exactly similar, except constant 5 square inches is used instead of 2.5 square inches. Used in this manner the planimeter enables one to figure out irregularly bounded areas very easily and with sufficient accuracy.

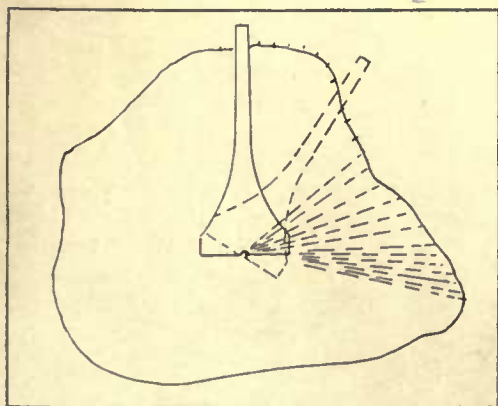


Fig. 2. When the planimeter is used from the central point mark the divisions made where it cuts the boundary

"From the Builders Journal and Architectural Engineer"

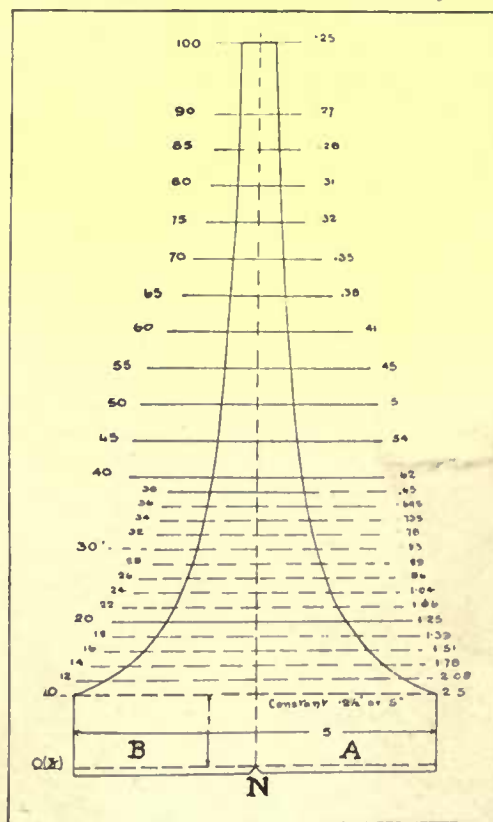


Fig. 1. The numerals at the right denote the length of the successive bases of trial rectangles, those on the left, the altitudes

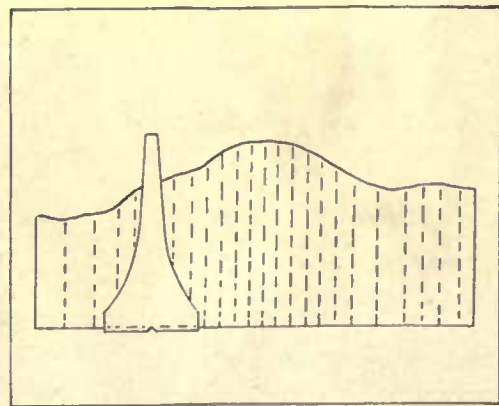


Fig. 3. When used along the base line each division is equivalent to the whole area of the constant, or A plus B



Furnishing and Decorating the Nursery

THE MODERN IDEA IN CREATING AN ENVIRONMENT FOR THE CHILD—WALL PAPER AND ARTICLES OF FURNITURE THAT BRING THE DELIGHT OF A NEW TOY

BY SARAH LEYBURN COE

Photographs by the Author

FURNISHINGS for the modern child's room, like everything else that belongs to that important personage, are as complete in the smallest detail as skill and ingenuity can make them, and every feature of a well-appointed bedroom may be duplicated in miniature for the youngsters.

The wall-papers and draperies especially designed for nurseries and children's rooms are in a way more distinctively juvenile than the actual pieces of furniture, and are a most important consideration in fitting out such apartments. If one does not care to go to the expense of furnishing a nursery completely, paper and curtains that will leave no doubt as to the identity of the room may be had at small cost, and from this simple touch the scheme of decorations and the furniture, to say nothing of the cost, may be indefinitely extended.

Strictly hygienic parents who scout the idea of wall-paper as being unhealthy and will have nothing but painted walls in a bedroom are confronted by a bare expanse that may be sanitary, but is neither attractive nor interesting for the child. With walls treated in this way a decorative frieze may be used with good effect. The friezes, which come in panels varying in depth from fourteen to nineteen and one-half inches, are printed in gay colors on backgrounds of blue-gray, ivory-white, drab and other neutral tones that can be matched exactly in the color of the walls. The de-



A wall paper printed from designs of Boutet de Monvel, a famous illustrator of child life, is particularly well adapted to the nursery

signs include processions of Noah's ark inhabitants, farmyard animals, chickens and ducks, Normandy peasants going to market, toy villages with stiff little soldiers and prim-looking trees, hunting scenes, and a row of Dutch kiddies indulging in a mad race across the paper.

If wall-paper is used it also matches the background of the frieze, the paper being either in a solid color or with a figure so inconspicuous that it gives the impression of a single tone.

One of the new papers for children's room is a reproduction of the quaint Kate Greenaway figures that are quite as fascinating to little people in these days as they were years ago. The background is a pale yellow and the figures are printed in rather delicate colors, each group representing one of the calendar months. The effect is particularly dainty and the designs are diverting for the children without becoming tiresome from too great contrast in color. Another paper that shows groups quite as charming is

printed from designs by Boutet de Monvel, the famous French illustrator of child life.

A new idea, and one that is proving popular, is a decided departure from the conventional wall-paper, with its figures at regularly repeated intervals. This consists in first putting on the walls a paper of solid color to be used as a background for single figures or groups that are cut from friezes and pasted on to suit

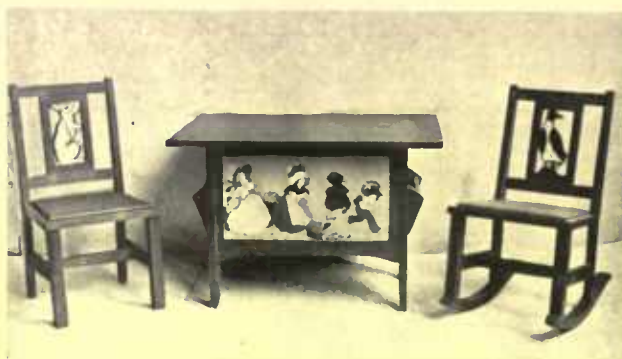


These friezes and the ones at the top of the page are four of a number of similar designs covering a variety of subjects. They are printed in gay colors on neutral backgrounds which may be exactly matched by the wall paper

one's individual taste. The figures, of course, must be quite large, in order to be effective, and in some favorite groups cut from a frieze showing little Dutch girls and yellow chicks the latter are even larger than life. For nurseries, when the children are very small, the figures are often arranged in a frieze just above the foot-board, so that they come on a line with the child's eye, and are therefore vastly more entertaining than when placed at the infinite distance of the top of the wall.

Blue and white seems to be the favorite combination of colors for nursery draperies, and among the all-over patterns are a lot of roly-poly children picking gigantic daisies on a pale blue ground, and also a Delft design on a white ground covered with black cross lines that are far enough apart to give a tiled effect. A number of other colors and patterns may be had, as well as the gay printed borders that come two strips to a width of the material. When figured wall-paper is used, draperies of solid color with the printed border are rather more satisfactory, as one set of children or animals tumbling over the walls, and another set chasing across the draperies create a bewildering impression that is anything but restful and quieting for the small occupant. The borders are particularly attractive for curtains made of plain scrim or some soft white material, and are stitched on in strips or cut out and put on in silhouette.

Floor coverings especially suitable for children's rooms are to be found in the more or less recently revived rag carpet rugs, either plain or with figured borders. Almost any of these rugs with their decorative strips showing queerly constructed landscapes are suitable, but most appropriate is one that has a solemn procession of geese across either end, or another that is ornamented with a family of black and white bunnies lined up against a red brick wall. They come in various sizes, from the small hearth rug up to the one that is large enough



Tables and chairs decorated with colored figures are a source of pleasure to the child



The nursery may be fitted up as the child's "very own" room with but small expense. Substantial furniture may be had of a cheaper grade, as it is but for temporary use

for the center of an average size room.

A new rug for nurseries that is rather more practical than pretty is woven in the same way as the rag rugs, but instead of cotton materials, strips of oilcloth are used, rolled so that the glossy side is uppermost. The idea was first employed in making small rugs for bathrooms, as they are waterproof and easy to keep clean, but they are quite as serviceable and sanitary for children's rooms, and are cleaned by wiping off with a damp cloth. They are made in different sizes, and in a mixed design, like the ordinary rag rug, or with white centers and borders of solid color.

In the way of furniture, chairs and beds are to be had in a much greater variety than the other pieces, and the miniature Morris chair is no doubt the most attractive piece of furniture that is made for the little folks. It comes in almost as many different styles and prices as the grown-up variety, and may be had in light or dark wood, with cushions of velour or leather or figured cotton material, and is a perfect reproduction of the large chair.

Little sets consisting of table and two chairs, one straight the other with arms, are decorated with juvenile figures in color, and may be had for prices that are quite reasonable. They are especially useful when no attempt can be made at arranging a regulation nursery. One of the most serviceable of these sets is of dark wood with leather seat chairs and a table of good size, the top of which is hinged and may be raised, disclosing a receptacle for toys or books.

Small willow and wicker tables and chairs are made in attractive shapes, many of them copies of the larger pieces, and are used either in the natural color or stained to harmonize with the color scheme of the room. Less substantial than the pieces made of solid wood, they are rather more practical for older children than for small ones who are no respecters of furniture, and while designed for use all the year round, they are particularly suitable for

(Continued on page 252)



The dainty figures of Kate Greenaway are as interesting to the present day child as to the former generation. The figures here represent the different months

Restoring Old Shrubs to Vigor

HOW TO MAKE THE DERELICTS OF OLD GARDENS FLOURISH AND BLOOM AGAIN—THE WHOLE MATTER OF PRUNING AND TRANSPLANTING SHRUBS

BY GRACE TABOR

Photographs by H. H. Saylor

THE shrubs most likely to be found growing where old gardens have been, or around old houses, are lilacs, the old Carolina allspice or sweet shrub—called by some strawberry shrub—Tartarian honeysuckle, snowberry, privet or prim, as some know it, the fragrant syringa or mock orange, snowballs, "bridal wreath," rose of Sharon, barberry, and last but far from least, the delicious, bitter old boxwood. These are the shrubs therefore to which special reference is made in all that follows.

Of them all the boxwood, elusive, uncertain and difficult to establish upon occasion, yet often thriving lustily under the seemingly adverse conditions of old, neglected dooryards alone does not show neglect. Gaunt and twisted and "skinny," the bare branches of the other old bushes are lifted piteously from the tangled vegetation; but the boxwood is superior to all this. Nothing undertakes to choke it, or to encroach upon its rightful territory, for it bears itself with a severe dignity that holds even the most lawless weed at a distance; and instead of growing gaunt and shivery and naked, it grows rotund and snug and more and more contented-looking as time passes. So with boxwood, all there is to do is cut away any dead wood, trim the grass at its feet and let it go on just as it has been doing, all by itself. It is very much above the ministrations of man.

With the other things there is work enough, however, to satisfy the most energetic—and work that may begin at practically any season, for the first of it is simply a house-cleaning sort of job, preparatory to the actual task of renovating. First of all the ground around, up to, and within the branches, must be laid bare. Every weed and blade of grass must be raked and scraped and cut away; and this may, of course, be done at any season. It is just as well, however, to let it go if winter is immediately at hand, for the removal of such protection as dead grasses and stems from the roots of the shrub is not wise, especially as the plant has grown used to having them there. But autumn is not too late to get at it, for the winter mulch will take the place of this mulch of Nature.

Go over the ground with grass shears and cut everything down

—every little blade of grass that springs up between the shrub's branches and every fugitive, tiny weed seedling. Then dig over the entire surface and root out everything that has been cut off. With an old dense shrub that has stood fifty years this is not the task of a few idle moments. Among its branches, between and against them and sometimes twining around them, all sorts of persistent things will have established themselves; and these will resist stoutly the effort to dislodge them. Not another thing should

be done, however, until they are dislodged, for they must come out before the shrub itself can have anything like its proper share of nourishment from the soil. Even the tiny grass blade is a robber—every single one counts against the work of rehabilitation.

When this basement cleaning is completed, look the specimen over carefully, taking each branch in turn and following it from its top to the ground to see exactly its condition. There may be an immense number of branches, crowding and rubbing against each other so that every one is bruised and injured whenever there is the slightest wind, or there may be very few branches, long and straggling, showing a great deficiency in nourishment, light or space, or all three.

When the former condition exists it is likely that the branches are simply a profusion of water sprouts or suckers. These

are rank growths sprouting from the roots, from the branches down near the ground or around the crown of the shrub, and they hardly seem to be a part of the shrub proper. Their leaves are often of unusual size compared to the leaves of the shrub in its normal condition—just as the leaves of very young growths are likely to be—and they bear every evidence of receiving all the vigor of the plant, while the old top dwindle and withers, starving to death.

This growth of suckers is especially likely to occur when large branches have been ruthlessly pulled from the bush, as is the case so often with old lilacs and syringas. Picking armfuls of bloom amounts to a heavy top pruning, and heavy top pruning always tends to encourage—or rather to force—the production of wood



With care even the oldest shrub may be restored to its former vigor. This hardy hydrangea is all the better for its strong, woody, tree-like growth

to take the place of that lost. Water sprouts are the shrub's efforts to produce this wood in a hurry, to get back the equilibrium between roots and top of which it has been robbed.

Half of the delight of an old place is in its huge old bushes; the sacrifice of these great tops is therefore the last thing in the world one wishes to contemplate, yet when growth has stopped in them and begun anew at the base of the shrub, it looks very much as if trying to save them were a hopeless task. Fortunately, however, cutting back vigorous growth will usually stimulate growth in less vigorous parts, provided that the new shoots which will surely make their appearance after such cutting back, are nipped in the bud as soon as that bud appears low on the old trunks or main branches.

This does not mean that new leaves and the little shoots which start out along the branches in an orderly manner, are to be destroyed; these are the desirable responses to pruning. The sprouts which are not wanted are those which rise from the crown of the plant, or very low on its branches. A season or two of constant watchfulness against these is required—indeed, vigilance always is necessary, even with young shrubs, to keep this sort of growth from sapping the vitality of the specimen.

With an old shrub that is overcrowded, first take out every water sprout—every branch or young shoot that rises at or near the base of any of the shrub's old branches. Cut these off close up to the branch whence they rise, making the cut which severs them parallel with that branch and so close that it leaves absolutely no stub. After the young suckers are removed, take out any old branches that are crowding, or that are over long, and thereby out of proportion to the rest of the shrub, or that seem particularly weak and unpromising.

These should also be cut out at the point whence they rise; usually this will be at the ground. Those which crowd the center of the bush especially should be sacrificed. Some can always be spared, and it will not be apparent that they are gone on an old bush, for the center must be opened up to the sun so that light may stimulate an even growth throughout the entire crown.

After this is done cut back a few inches the tips of those branches which are left. Then wait, as far as pruning goes, until you see what a season brings forth. Some shrubs respond differently than others; each is a problem in itself, and after all, their renovation is only a preparation for Nature, as far as we are concerned. We cannot do very much of it ourselves, and what we do we must do without presumption

and in moderation, waiting to see how she is affected by our help.

Apply a fertilizer which will encourage the growth of branch and wood and flower, a fertilizer rich in phosphoric acid. Coarse ground bone furnishes the best and most directly available form; four pounds of this mixed with one pound of muriate of potash will give a quantity sufficient to use under four shrubs each having a spread of eight feet. Spade this into the soil over the entire root area; this is equal to the spread of the branches. Add a thick mulch of manure over the plant's roots when frost has come, but not before. Spade this in when the spring comes.

When the first spading is done, let it leave a saucer-shaped depression around the shrub. This will hold the water and encourage the leaching down of the fertilizer direct to the roots which are to be fed, instead of allowing any of it to go to waste.

During the early summer following this first pruning and fertilizing—about the middle of the next June—go over the bush again with the pruning shears, if it needs it. It does need it if it shows a disposition to put forth new leaves and shoots only at the tips of its branches; otherwise it does not. Every branch that has not clothed itself fairly well with new shoots must be headed in to a point below the first leaf or first shoot that it does show, to induce branching still further down. For the tendency is always to grow at the extremities, and the only way to overcome the long-leggedness resulting from such a tendency is to reduce the extremities, to cut away the branch itself far enough down to force its growth out at the desired point. Fertilizing and cultivating and general pruning may quicken a shrub to such a degree that very severe cutting back may not be necessary—that is what we hope and why we wait a season,

but if a season's growth does not show that they have done so, it is useless to wait any longer. Rub off all very low-growing sprouts perpetually and promptly, watching out for them in the spring following the first work especially.

It is a practically universal rule that weak plants are benefitted by severe pruning, while strong plants are better for less. The reason lies in the necessity for restoring equilibrium between root and top which the plant is under. Normally this equilibrium is perfect, and a shrub or tree has just enough roots

to supply its top with the nourishment and the moisture which that top requires, and just enough top to make use of the nourishment and to transpire the moisture which its roots supply. When,

(Continued on page 257)



A typical example of an old lilac with its scraggly branches and top sapped by a large growth of suckers at the roots



Trim off all lower growth which prevents nourishment from reaching the top; keep the soil free from growth about the roots



Rough boughs fitted together in a natural manner seem a proper support for the twining arms of the wistaria



There is a dignified decorative effect to a smooth lawn, especially where there is an extended landscape to be seen beyond



The irregular flagstones in this pathway artistically simulate an old garden



A seat is really an essential part of the garden make-up. Here the substantial bench seems to invite one to enjoy the garden's beauties

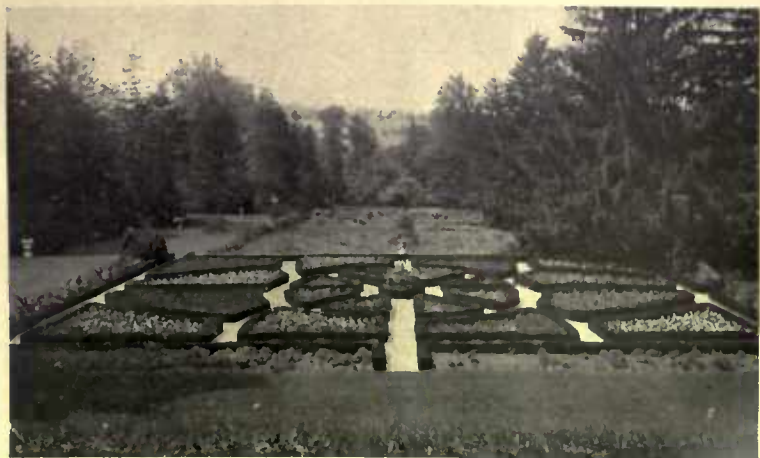
T W E L V E G A R D E N E F F E C T S



The least expensive things are often the most satisfactory. This simple arbor seat is the most popular spot in its garden



The English frequently bound their lawn terraces with flowers and plants. The green stretches make a frame for the masses of color



One of the real old-time gardens. The small beds, each with but one kind of flowers, are framed primly with box



Although thatched roofs are unsanitary on our houses their picturesqueness may be preserved in the rustic summer house



Where porch space is at a premium the detached arbor with a paved floor and low wall is a successful substitute

WORTHY OF EMULATION



The pergola is too seldom seen well clothed with vines. Uprights and beams are of locust



No garden is complete without its private nook. The semi-circular white bench gives many varying views over the garden



The lily-pool finds no more appropriate edging than the bank of iris, which is always at its best near water

What Varnishes Really Are

SOME ESSENTIALS FOR THE PROPER KNOWLEDGE OF VARNISHES—
THE TESTS FOR GOOD MATERIAL—PROPER USE AND APPLICATION

BY KATHARINE NEWBOLD BIRDSALL

ONE might almost as well go into an apothecary shop and say "Please give me some medicine," as go to a paint shop and ask for "some varnish." For unless one uses the proper kind of varnish in the proper way, the results will be anything but satisfactory. With no knowledge of the subject, one might think that a very fine varnish at a high price could not fail to be good for one's needs, no matter how modest those needs might be.

This is a fallacy, however, for it is worse than useless to apply a fine piano varnish to a floor.

A knowledge of the essentials of varnish is indispensable to the house owner as well as to the house builder, unless he approves of leaving every decision in the hands of others. In this case, our advice is: be sure the others have the requisite knowledge!

A painter is not always an expert varnisher, although a few painters may have a thorough understanding of the grades of varnish, their uses and methods of application. Varnishing is a trade or art in itself, and the employment of knowledge of the subject, coupled with good judgment, pays.

The two important kinds of varnish are spirit and oleo resinous varnish. The principal spirit varnish consists of a solution of shellac in alcohol. Shellac is a resinous substance, a form of lac, which is used as an ingredient of laquers, dyes and sealing-wax, as well as of varnishes. Lac is produced on various trees by a scale-shaped insect, the female affixing herself to the bark and exuding this resinous substance from the margin of her body. When this is melted and reduced to a thin crust it is termed shellac. The banyan or Indian fig trees, those wonderful specimens whose branches, drooping, take root in the ground, sometimes providing shelter for thousands of men, harbor most of these lac producing insects.

The rule for making spirit varnish in America is to dissolve five pounds of flaked grain shellac in a gallon of alcohol. This is rather heavy, however, for average use; and the rule reduced to three-and-one-half pounds is best for common usage.

There are two kinds of shellac, orange and white; the white being bleached with that powerful bleaching agent, chlorine gas, which somewhat destroys the quality. White shellac is necessary for use with white paint, but in all other cases the natural or orange shellac is preferable. Unbleached goods are, naturally, always stronger than the bleached.

The best results for orange shellac varnish are secured when it is carefully dissolved in alcohol, 85 per cent. or stronger, in an earthen jar. The dry shellac should be gently dropped into the alcohol at night and carefully covered without stirring or even shaking. The next morning it may be gently stirred with a wooden stick—never metal. Stir for a couple of minutes once an hour until night, when it will be ready for use.

White varnish is made in a different manner, the white shellac needing at least 95 per cent. alcohol, with mechanical agitation from the start.

Orange shellac resin will keep indefinitely, but the bleached



From the great branches of the banyan tree is gathered the lac produced by a small, scale-shaped insect

should be dissolved on purchasing, as it does not keep well.

Damar is also a good spirit-varnish; damar is a resin dissolved in alcohol and is secured principally from East Indian trees.

The best oleo-resinous varnishes differ from the spirit, in that the resins are dissolved in linseed oil with the aid of heat. As the resins dissolve, the oil thickens, necessitating a thinning with turpentine or a good substitute. The more oil used in the making, the more elastic and durable the varnish; the

more resin, the harder and more lustrous the varnish, and the quicker to dry.

The resins are formed in large lumps on trees; but instead of being procured from the living trees, they are usually secured from the earth where the ancient trees have fallen, decayed, and long since been buried. The action of time and the earth improves and hardens the resins.

Light colored oleo-resinous varnishes are more costly than the dark, due to the scarcity of the clear, transparent resins. For every use but on or with white paint, however, the dark colored varnish is acceptable.

Oleo-resinous varnish is harder to make than spirit varnish; the resin is melted over a hot fire and when it is at the temperature of melted lead, the hot linseed oil is added. The mixture is cooked for several hours to thoroughly blend and the turpentine is finally added to thin it to proper consistency. The resin loses over a fifth in melting. Oil of a weight to equal that of the melted resin will, when mixed, form a good, hard furniture varnish, smooth and lustrous. With *double* the quantity of oil, the durability is increased, and the varnish is suited to interior woodwork. If more oil yet is added, it will make a good outdoor varnish—which will take too long to dry to be used indoors.

If oleo-resinous varnish is prepared accurately, water will not affect it; but if incorrectly mixed or cooked, it may absorb water to its detriment.

A well-known varnish test is to cover a board with the varnish, let it dry, and then leave a wet cloth or sponge on it over night. If the varnish turns white by morning, it shows that water has been absorbed; if after the water has dried the white is still visible, it is a sign that water has injured the ingredients, showing some defect in the materials or making. This condition indicates a varnish which should be avoided.

Before venturing very far with varnishing, it is well to have it firmly fixed in the mind that an outdoor varnish is quite different from one used indoors. Also that on all surfaces near the doors and windows which are directly exposed to the effects of the sun and the elements, an outdoor varnish should be used. These surfaces comprise inside blinds, window-sash, sills, jambs, outer doors and railings, etc. These parts should be finished with a weather-resisting varnish, like that used on the exterior woodwork of yachts—spar-varnish.

For indoor trim, the wood is first carefully prepared and a "filler" used to fill the cracks and make an even surface. For

(Continued on page 248)

The Fall Clean-up in the Flower and Vegetable Garden

THE IMPORTANT PROVISIONS TO BE TAKEN IN THE FALL THAT WORK FOR GREATER SUCCESS IN THE SPRING—SOME VALUABLE GARDEN SECRETS

BY F. F. ROCKWELL

Photographs by Chas. Jones, H. H. Saylor, N. R. Graves and Others

AS far as the appearance of things goes, springtime is the all-important and only important time for work about the place. It seems in accordance with the gardening operations of Nature to simply let Jack Frost step in and take possession without paying any attention to it. As a matter of fact, Jack is something of a landscape artist himself, and while the pictures composed of green things growing, and over-running brooks remain the emblem of youth and life, good people who no longer "trail clouds of glory" find sometimes a stronger appeal in the somber tints of Autumn.

But there are two things we are apt to overlook: first that not all of nature's performances are apparent on the surface, and what may seem to us but the blowing about of dead useless leaves is really very efficient mulching; and if you look in the woods and swamps you will find Nature's crop of spring-flowering bulbs all nicely started. Then, too, the majority of the things we use to make our homes more beautiful are grown out of their natural environment, and having given them artificial conditions we must supply artificial care. The bed of azaleas cannot be left to itself, nor should gladiolus bulbs remain in the ground although they may seem to have died down and prepared for winter in a very natural way of their own.

One of the common mistakes in regard to such work is the idea that all hardy things must be set out in the spring. And as the spring is a very busy season, when everything else is demanding attention, and nothing wants to wait—why whatever can be put off is put off, and consequently is not done at all. Such work, for instance, is the planting of new shrubs.

No class of ornamental plants is less appreciated, or I should

say, less utilized, than the hardy shrubs—particularly the hardy flowering shrubs. We admire them tremendously in parks or get most enthusiastic over their beauty in some large estate, but somehow we don't seem to realize that they are not expensive to buy, need comparatively no care and deserve a place in our own yards, where they will grow as well as upon the finest estate.

The soil requirements of shrubs are not exacting; good drainage is the most important factor. They are adapted to a very wide range of usage: as backgrounds for the hardy flower border, to make an informal hedge or dividing line—between lawn and vegetable garden, for instance, as a screen for some undesirable outlook, or to break the sharp line between tall growing trees and the flower beds and borders.

Few, indeed, are the places which would not be improved by a few shrubs, and when it is considered that even the best varieties cost only twenty-five cents to a dollar each for good strong plants which will make an immediate showing, there seems absolutely no reason why they should not be used much more universally than they are.

The time for planting hardy shrubs in the fall is *just after the first frosts*—about October first. But order now. Nurserymen

will ship on any future date you direct, or hold your order subject to shipping instructions.

Also get the ground ready now. The small-growing sorts should go about three feet apart; the larger ones five or six. Most catalogues give information as to size. Pick out the places where you need shrubs and spade up thoroughly, incorporating with the soil manure—either from the stables, or one of the prepared sorts now on the market—and bone dust. Of the lat-



Copyright by Detroit Photographic Co.

Nature's performances are not all apparent on the surface, and what seems to us the useless blowing about of dead leaves is really a very efficient mulching

ter two to four quarts per tree, if thoroughly worked through the soil, will pay for itself many times over in the rapid healthy growth induced. In hollows, or on ground apt to be wet, it will pay well to furnish additional drainage by digging the holes several feet deep, and putting in two feet or so of small stones, broken rock or something of the kind, covering this with old bags or meadow hay to prevent earth setting into the chinks when first filling in the holes. If it is dry when setting out, water in the holes when the earth is half filled in—not on the surface.

All the care required by most of the hardy shrubs is a slight yearly going-over to keep in good shape—not pruning—and an occasional cultivation around the roots to keep the soil crust broken up. While most of the hardy shrubs do not need protection, it will be a good thing to give them a mulching around the roots with old manure late in the fall, especially for the first few years until they get their full growth.

Directions for pruning and restoring old shrubs will be found on page 228 of this number.

The list of hardy shrubs is so varied that no attempt to go over it here is possible; but in passing I want to call attention to a few exceptionally attractive sorts or new varieties. Among the deciduous shrubs besides those which everybody knows, such as the hydrangeas, are the splendid varieties of althea and azaleas. For that hedge which you have been contemplating and which would look so much more attractive than the present fence, *Berberis Thunbergii* is the peerless shrub. For seven or eight dollars you can get fifty strong three-year plants, furnishing a beautiful, effective hedge seventy-five to one hundred and fifty feet in length. Personally, I would rather not crowd plants in hedges. Let them have a chance to attain some individuality. Be sure to include at least one of that old sweet-scented favorites, the strawberry shrub (*Calycanthus Floridus*). Plant it near the house, where its fragrance may enter every open window in the spring days. For an individual specimen, at a little distance so that its full effect will be had, put a smoke tree (*Rhus Cotinus*). That will cost you the sum of twenty-five cents! Its relative, *R. Glabra*, the sumach, with



Why does the amateur neglect the hardy shrubs? There are many corners that *Berberis Thunbergii*, for instance, might beautify

pendant racemes of beautiful white blossoms is not only very attractive, but very hardy.

The coniferous evergreens are very varied, and with their beautiful forms and variations of light and dark green, golden and silver-blue foliage, certainly offer the best of material for creating the winter garden pictures. These are more expensive, costing from \$1.50 to \$4 or \$5 each. But if only one in every two or three years can be afforded, they will make the foundation for the most effective and permanent ornaments in the entire garden.

The question of fall pruning ought to be considered—of roses especially. Most of the pruning required by roses will be accomplished by the spring cutting back and by cutting the blooms in summer. But where strong new growth has been made, and the canes are likely to be whipped about by the wind, they should be cut back after the leaves fall, to two and a half or three feet.

Do not be in a hurry to put on the winter mulchings; all mulching of hardy plants is not so much to protect from frost as to prevent alter-



Mulching of hardy plants is not so much to protect from frost as to prevent alternate freezing and thawing. *Romneya Coulteri*, the tree poppy, bound up in straw to accomplish this result

nate freezing and thawing. In November, after the first severe frosts will be time enough. Use leaves or rough manure to the depth of three to six inches, according to climate. Where severe winters are encountered they should be further protected with corn stalks, bog or pine boughs. For the smaller growing sorts, such as the Teas, a few wooden stakes with twelve or eighteen-inch chicken wire surrounding the bed, and filled in with leaves held in place by boughs, is a very neat and effective plan of mulching.

Fall is the best time to prepare the new rose garden. The plants should not be set until spring, but they will take hold very much better in a fall prepared bed. Select a well-drained spot in the lawn with good rich heavy loam, if possible. Dig out twenty-four inches deep, loosen up the soil below that, and fill in six inches with cobbles, clinkers or any good drainage material. Fill in with the best of the soil excavated, sods first, and mix with a heavy dressing of manure—cow manure being preferable—to within two inches or so of the surface level. Then add six inches of good clean loam. By spring this should have settled to an inch or two below the surface and should not be made higher if rain is depended upon for the water supply. The beds should not be more than five feet wide, to make care and cutting convenient. For the same reason long beds are preferable to large round ones.

If the hardy perennials have been planted in a mixed border and properly selected, there will still be many blooming in October, such as funkias, chrysanthemums, golden glow, Japanese anemones (wind flowers) and other late stayers. So not much can be done until severe frosts have killed the soft growth, which is not usually until after the first of November. When the proper time arrives, cut the old stalks off to within several inches of the ground and burn. (It is not advisable to add them to the compost heap, as they are likely to contain disease germs or insect cocoons or eggs.) Do not cut off too close to the ground, as the stubs give the roots a chance to ripen off naturally, and also help to hold the litter-mulching in place during winter.

If the bed has become



Among the hardy evergreens the erica or heath is well worth a trial. Its delicate blossoms add to its foliage beauties

frames. Two of the most important of the latter are the pansy and English daisy (*Bellis Perennis*). For best results these should be started in August, but if one can give them the protection of a frame, and seeds are sown at once, good strong plants may be had before the ground freezes in a tight frame. They like cool weather, and will start more rapidly now than six weeks ago. The ever admirable and desirable hollyhocks may be sown in a frame and wintered there without transplanting. A selected list of annuals and of perennials will be found elsewhere in this number and the reader is referred thereto.

Secondly, there are the flowers which should be propagated now, either to furnish new plants for next summer's garden, or plants for the winter window garden inside the house. Most of the flower garden plants are increased readily by cuttings, and it is nothing but ignorance of the simple process of rooting them which causes the loss of so many choice flowers every autumn. How often, for instance, in a lot of seedling petunias, are there a few of ex-



The sumach is another member of the *Rhus* family that should be planted for the glorious effect it makes in the fall, when both leaf and fruit are flame-colored

foul with weeds or grass, now is the time to clean it out—don't wait till spring.

After the ground has begun to freeze, put on the mulching—litter or rough strawy manure to the depth of two or three inches. A heavier protection is likely to cause premature growth in the spring, resulting in injury from late frosts. If possible, put the mulching on when the ground is dry—a few warm days, and moisture covered in sometimes causes trouble from rotting. In removing this covering in the spring, it is best to do it gradually, so as not to leave any new growths which may have started exposed to unfavorable changes in temperature. Don't be tempted to begin taking it off the first warm day. Wait until some of the late frosts are over.

There are several important lines of work to be looked after among the flowers in the fall if one would have the greatest success with them. In the first place, there are those which should be started for next year, some to be sown or planted where they are to bloom, others to start and winter over in

(Continued on page 264)

Planting the House Border

THE PRINCIPLES OF PORCH BED PLANTING—HOW TO OVERCOME DIFFICULTIES OF SOIL AND LOCATION—WHAT VINES, EVERGREENS AND SHRUBS ARE SUITABLE AND HOW THEY MAY BEST BE GROWN

BY WARREN J. CHANDLER

Photographs by Camilus Phillips, August Patzig, N. R. Graves and Others

IN the developing of landscape features on the home grounds every property has its distinctive possibilities. Where one lends itself to sunken gardens, approached by well-graded terraces or slopes surmounted by pergolas, another is entirely unsuited for such treatment, and yet may be as attractively embellished.

There is one trying problem, however, common to all properties, wherein the solution resolves itself into a few general treatments.

That to which I refer is the improving of the grounds immediately surrounding the house, including, of course, porch beds, which are usually a problem in this connection.

The real reason why this portion of the property demands the greatest thought is because it must be presentable in appearance at all times. We overlook the shabby appearance of the rose garden in October, the pergolas in April and each of the other features which at stated times during the year makes its special show, but the planting around the house should always be attractive, a pleasing frame at all times.

It has been the practice for years to depend on bedding plants to serve the need, but in spite of their showy appearance from early summer until autumn, they are the result of considerable care and expense, leaving for the winter a bare, unsightly void.

In endeavoring to satisfactorily dispose of this question several important conditions have to be taken into consideration.

Many houses of late design have overhanging eaves, which are a menace to plant life, making it almost impossible to plant in the ground directly under them, unless it be one or two kinds of dwarf growing perennials. The planting line ordinarily must commence beyond the line of the eaves.

Another problem almost invariably faced is that of good soil. It is usually the case that the soil immediately surrounding the house is

either a fill made of all the refuse ground—old lime beds, sand or clay from the cellar excavating—or the grade has been so great that the top soil is entirely gone, leaving a barren sub-soil in which it is impossible to successively grow plants.

The ideal soil for beds around the house is a heavy rich loam, containing considerable humus, the latter to give it not only partial drought-resisting properties, but also to make it highly productive for plant life.

In endeavoring to reach a satisfactory conclusion as to the best plants for this class of planting, we must confine ourselves to those which give the longest period of display.

The broad-leaved evergreens are unquestionably the first and best group for using in base plantings around the house. Not only are they effective out of flower as well as when in bloom, but are in most cases of dwarf, bushy habit of growth, which is just what is needed for such purposes. Use the hybrid rhododendrons and edge them with *Leucothea Catesbaei*, *Andromeda Japonica* or the *Mahonia aquifolia*, the holly-leaved barberry, and

a most pleasing effect results. Of course, to have success with such a planting, ideal conditions are necessary.

The evergreen-leaved privets, *Ligustrum Japonicum* and *Ligustrum lucidum*, are becoming popular and will succeed as far north as Philadelphia under favorable conditions. These are admirable for plantings of this kind.

The *Azalea amoena* and similar kinds are fine for dwarf plantings of this character, and are also used in conjunction with the other plants mentioned. Care is necessary in using *Azalea amoena* as its magenta or claret shades "fight" with scarlet, pink and other similar colors.

Many beautiful results are possible from the coniferous evergreens, though a careful selection in this case is absolutely necessary. The retinisporas, or Japanese cedars, are admirable for this use. Of course, they



The most successful planting about the house is that which remains beautiful throughout the year. When the leaves are dead and branches bare, English ivy, *Mahonia aquifolia* and dwarf evergreens add a cheerful note



Evergreens and deciduous shrubs are combined to advantage in the planting about this old house. Note the bright blossoms of the clematis in brilliant contrast to ivy



The shapely growths of arbor vitae and dwarf cedar can be well used in odd corners and angles and they thrive well in such places. George Nichols, architect

grow rather quickly, but as they lend themselves readily to shearing they may be kept to almost any size. Among these *R. squarrosa* may be particularly recommended, because of the steel-blue color of its foliage. The full, pleasing style of *R. plumosa* and its golden form, *aurea*, are also worthy of mention.

There are many kinds of dwarf arbor-vitae which are well suited for bedding, particularly *Thuja pumila*, *T. globosa*, *T. Hoveyi*, and the dwarf golden Chinese one, *Biota nana aurea*.

The Irish, Swedish and Chinese Junipers are all fine for bedding purposes, particularly where one's taste runs to the tall, columnar style of evergreens. Colorado blue spruce is frequently used also, but its life in a bed must be short-lived if it is to be cared for, as it will not stand very much pruning, and makes a quick growth compared to the others mentioned.

This condition holds true of spruce and firs in general. Pines are out of the question, unless it be the dwarf mountain pine, *Pinus Mughus*, as they are coarse in appearance and grow too

rapidly to be feasible for bedding.

Next in value and importance to the evergreens are the shrubs, which, though clothed in foliage barely nine months of the year, are not really objectionable to look upon in winter, especially when there still remain bright berries or attractively colored stems. There is a wide selection of shrubs from which to choose. Of course the spring blooming kinds predom-

inate, as is the case with deciduous shrubs in general. Among these may be especially recommended spiraea Van Houttei, the graceful weeping form of spiraea with its thousands of pure white blossoms, *Deutzia gracilis*, with those delicate white, bell-shaped flowers, *Azalea mollis*, in yellow or rose flowers and spiraea Thunbergii with its delicate, light green foliage and white flowers. The snowberry, *Symphoricarpos racemosus*, is splendid; and the golden mock orange, Japanese barberry, *Stephanandra*, the dwarf spiraea *callosa superba*, *Deutzia Lemoine*, sweet pepper bush and Japanese roses are others of value for this purpose.

A little study of these shrubs, and with a very limited knowledge, a grouping may be arranged that will be highly pleasing. The one care to be exercised is to see that the taller growing kinds are kept in the background, using the others for foreground positions.

Generally speaking, perennials are unsatisfactory, as they do not appear attractive when out of flower, but there are exceptions highly worthy of mention. The peonies and iris form two splendid groups for interspersing with the shrubs or may be massed individually. The foliage of the German iris is very attractive when it is out of flower, and the same can be said of peonies.

Where local conditions favor it, for example, where a house is set on a shaded slope, a rockery effect may be made a feature (Continued on page 253)



There are numerous hardy shrubs among the barberries that are fitted for the house border



The flowering shrubs should not be neglected—*Deutzia gracilis* especially should be tried



A remarkably effective and inexpensive treatment of cypress. The wood is cheaply milled, stained brown and wax finished

What Can Be Done in Finishing Inexpensive Woods

ECONOMICAL EFFECTS WHICH MAY BE HAD BY THE USE OF COMMON WOODS TREATED AT HOME—SOME POINTERS FOR THE MAN WHO WISHES TO BUILD EFFECTIVELY AND AT MODERATE COST

BY LOUISE SHRIMPTON

Photographs by George A. Daskam and G. E. Doust

INTERIOR woodwork in the small house may be as individual and distinctive as in the large one. If economy is a chief consideration, delightful results are gained by the use of cypress, hard pine

and furniture is perhaps the lack of interest in the background of rooms. Doors and window frames, designed for their places, and showing the natural grain of the wood, may be as interesting as bits of tapestry, still keeping their place as part of a wall. In white painted woodwork, paneling should show good space divisions. Carefully studied in a large house, the woodwork of a smaller one is often left to the builder or contractor, with the result that stock mouldings, unfitted to their places, are used.

The style of wood trim decided upon, a choice of woods must be made. Each has its peculiar properties. Among those suitable for the living-rooms of a small house is cypress. It is plentiful, popular for exterior trim, and beginning to be appreciated for its possibilities in interior work. A smooth wood, with beautiful grain, taking on refined color effects, it is used to advantage where gray greens or browns are desired in the wood trim, with wood or wicker furniture stained in corresponding tones. It can be obtained for from sixty to sixty-eight dollars a thousand feet, the price depending on the quality of the wood.

Hard pine makes unusually pleasing trim for the living-room if stained in a cool color that counteracts its over-hot tones, and allows the real beauty of its grain to be seen. It can be had for forty-five dollars a thousand.

Whitewood is quite satisfactory stained in dull soft colors, though it lacks beauty of grain. It is often used for woodwork that is to be painted white. The cost is forty-five dollars a thousand.

Plain oak, desirable for the living-rooms of a house on account of its beauty of grain and soft texture, lending itself to refined color effects, costs from seventy to ninety-five dollars a thousand. Where quartered oak furniture is used, perfect harmony is gained by the use of plain oak as woodwork, treated with ammonia fumes and stains.

Chestnut, costing somewhat less, is often substituted for the oak, as it takes a similar finish and has a vigorous, sweeping grain that commends it for use in large rooms.

Gumwood, costing about the same as hard pine, is especially attractive,

and other comparatively inexpensive woods, with whitewood or poplar for white-painted woodwork. Plain oak and chestnut are not prohibitive in cost. Home builders, if interested in chemistry or of an artistic bent, may enjoy experimenting in stains, testing their color properties upon different woods and superintending the finishing of woodwork, or even doing much of it themselves.

A scheme for the style and color of furniture, woodwork, wall coverings and draperies should be carefully planned as a preliminary step. Simplicity is desirable in a small house scheme, and elaborate period styles, even if possible from the standpoint of cost, are scarcely practicable. A stately Adam drawing-room cannot very well be crammed into a small house, and Louis XVI styles seem a trifle absurd. Our own Colonial attempts at bringing the classical back to life resulted in charming cottage and

farmhouse woodwork and furniture, much more helpful to the builder of a small house. If no traditional type is followed, but simple modern furnishings are preferred, then flat unfluted mouldings, wainscoting of planks of varying width fastened against the wall to a height of several feet, or wood strip combinations, may be used. Whatever the style, the woodwork should be interesting. One reason for the overcrowding of houses with bric-a-brac



This interior by Parker & Unwin is typical of the English idea that wood itself has a decorative value



An American adaptation of the English idea shown opposite. Woodwork here takes the place of wall decoration



Whitewood and poplar are extensively used for enameling in white or ivory. The tastefully finished dining-room and living-room in the home of Mr. A. S. Thomas, Blue Hill, Me.

in its smooth sheen and satin finish of surface. It is condemned by many contractors and lumber dealers, however, since it "buckles" and does not "hold," though these undesirable results do not invariably follow its use. Quarter-sawed red gum is recommended by experts.

Basswood is inferior and not to be recommended for interior woodwork.

While "stock" doors are as a rule pretentious in style, a good and simple pattern is occasionally to be found on the market. Birch doors are quoted at three dollars and a half apiece, net. Fir doors at two dollars and a quarter apiece can be used with pine woodwork, stained to match.

In butlers' pantries and kitchens, the woodwork, ordinarily of hard pine, is now often given a coat or so of linseed oil, instead of the old highly varnished finish that made it so uncommonly ugly. An occasional oil rubbing cleans the wood, or warm water is used. Sometimes a light coat of stain with wax finish is substituted. If paint is employed it is white, pale gray or a pale but warm yellow. Dark paint makes a dreary workroom, and the old reason for its use, that it does not show dirt, seems to the modern housewife shockingly unhygienic.

Two unusual sources of supply for woodwork for the small house are the neighborhood trees of suburbs or of countryside, and the wrecking firms of large cities. Trees that are sacrificed to make room for buildings may sometimes be purchased by the homebuilder, who superintends their cutting into lumber, and uses them for the wood trim of a room, thus getting individual effects and perhaps a rare wood at small cost. It is not possible, of course, to obtain great oaks such as Miss Jekyll, the Eng-

lish garden expert, placed rough hewn as ceiling beams in her home. But a living-room and library in one of our Eastern towns have paneled doors, built-in furniture and other woodwork of butternut from an old butternut grove in the district, the mellow golden tone of the oiled wood possessing great beauty. A house in the Middle West used to be a striking example of the utilization of material near the site, and if still standing is greatly inflated in value, with its high wainscoting—as well as clapboards—of black walnut. Old cherry trees may give a unique quality to a room, and local woods that would be scorned by the "trade" and burned for firewood on account of defects of grain, are utilized by clever home-builders.

For the small house in Colonial style, mantelpieces, doors and paneling from old houses may be picked up at wreckers' establishments.

(Continued on page 262)



Cypress is capable of taking a variety of finishes and is beautiful in its good graining. It is one of the most economical treatments for the interior.



The house is built after the Colonial style, and the ordinary running bond is used; but even though its lines are rectangular variety and color are obtained by the use of marble keystones and window ledges, and brick quoins



A corner of the living-room with glass doors divided into small panes

THE HOME
OF
EDW. T. HAPGOOD
architect
Hartford, Conn.



The dining-room fireplace and paneling is white, contrasting with the dark woodwork



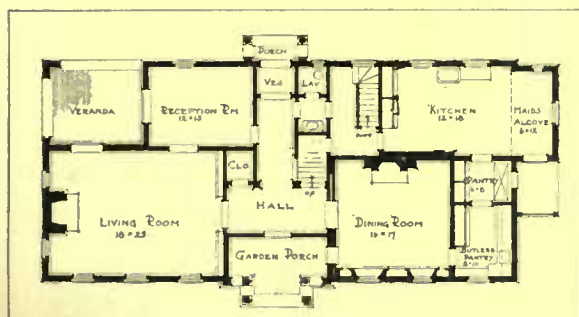
The kitchen end of the house is screened in by a dignified lattice which conceals the maids' porch from the garden



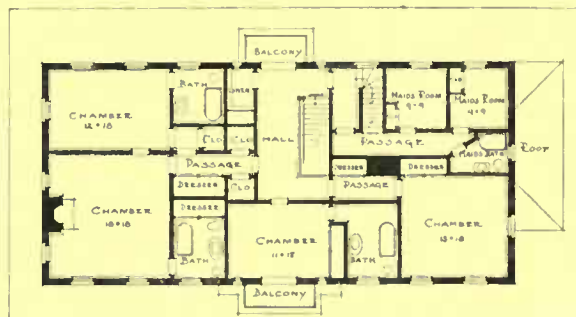
The veranda occupies a corner of the porch front and opens on the living-room and reception-room. It may be closed during the winter



The antique carved stone fireplace forms a very high opening such as was common in the best work of former times. The size and furnishings are suggestive of ease and solid comfort



THE HOME
OF
EDW. T. HAPGOOD
architect
Hartford, Conn.



The architect has preferred size to number of rooms; though few, each is extremely large

A point worthy of notice is the large amount of closet space allotted to each room



Mr. Hapgood has not cut up his ground floor into numerous rooms. This corner of the great living-room serves as his library. The other end is used more as a sitting-room



The Editor will gladly answer queries pertaining to individual problems of interior decoration and furnishing. When an immediate reply is desired, please enclose a self-addressed stamped envelope.

Lightening the Housewife's Burden

THERE are countless little ways in which the cares of the housekeeper may be made lighter and her work more easily performed. Much depends upon the manner in which the house is arranged and a little extra expense in providing conveniences for doing the housework is well worth while.

Take, for instance, a little cupboard in the kitchen wall to conceal the electric meter, which must be read every few weeks by a representative of the electric company. Such a cupboard occupies but little space and with it the man who reads the meter does not walk through the house to the cellar or the garret, tracking mud or sand over the floors and rugs.

Let there be a transom over the kitchen door. It is a convenience which too few women understand. If properly adjusted, it will allow the entrance of just

enough air to keep the kitchen comfortable without creating a draft and will permit the escape of odors much better than a window, because it is near the top of the room. It is better that it should open from the top than from the bottom.

Castors

TOO few housekeepers appreciate the value of high-grade castors. It often pays to have new castors put on heavy pieces of furniture which are frequently moved about—such as beds and chairs—choosing those kinds which run easily and which will not mar the floors or injure the rugs. When castors of the right sort are used, a heavy chair can be moved with the pressure of one finger.

A Folding Desk

A MAHOGANY folding desk that makes an attractive piece of furniture open or closed, is a novelty that will be found useful on account of the ingenuity of its fittings and the small amount of space that it may be made to occupy.

Hardly more than a writing portfolio in size when closed it is so arranged that when open it forms a writing desk large enough for all practical purposes. The fittings are unusually complete and there is the additional advantage of a special place for each of the articles, so that they are not so apt to be mislaid as in a desk.

There is a blotting pad of generous size, a large pocket for private papers and letters, and places for note paper and envelopes. On one side is a calendar, on the other a memorandum pad with address book and note book. The ink well is in a little square leather box that is stationary, and the top is of the safety variety, such as is seen in writing cases for traveling use, while in small pockets are the stamp box, sealing wax, scissors, paper knife, eraser, lead pencil and all of the little things necessary for a complete desk.

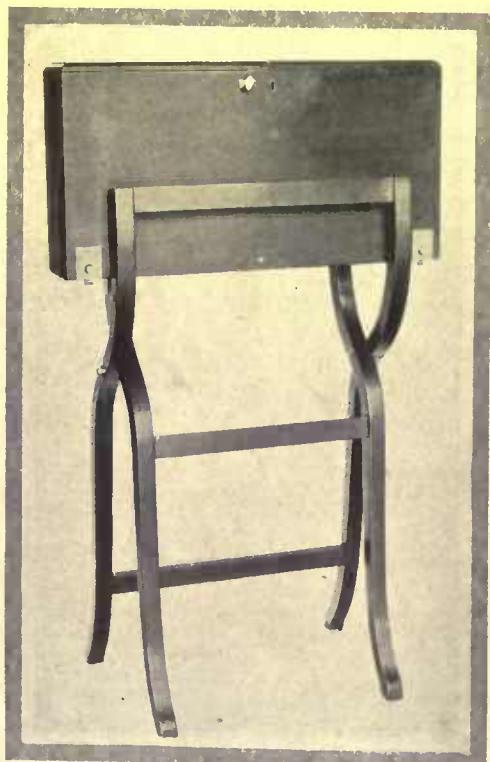
For the guest room where a writing desk is a necessity, even though it may not be used to any great extent, the folding desk is particularly serviceable, as it is dustproof when closed and always ready

to use at a moment's notice, with all of the needed articles at hand. Not the least of its advantages is that it occupies so little space when closed, and it is therefore most desirable for the small room in which the amount of furniture must be limited.

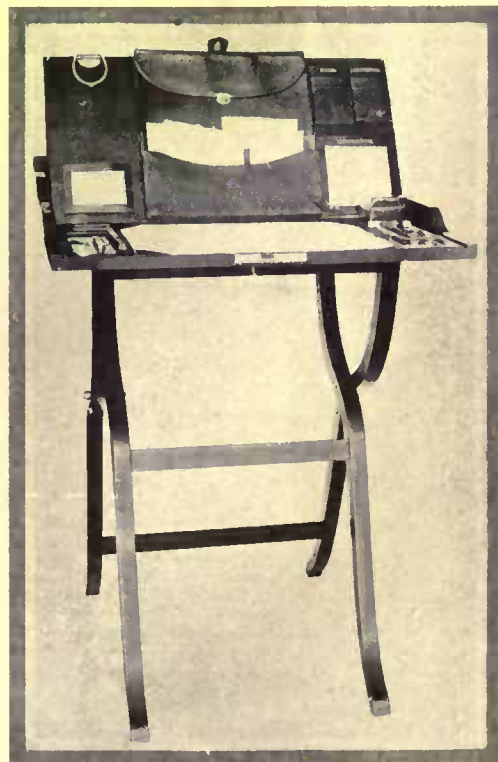
Considerations for the New House

IN one well-arranged house which I visited, there were a number of closets in the basement, which were designed, I learned, to accommodate the window screens. There they were stored out of the way, properly numbered, and placed in order, so that they could be quickly put in place in the spring.

It is also an excellent plan, when a new house is built, to have a small cellar, with cement floor and walls, built just outside the main cellar and near the furnace or heater. This little auxiliary cellar is for



The desk has the advantage of folding up and occupying a very little space



It is particularly serviceable, for each compartment is labeled and of convenient size



Garden Suggestions and Queries



Conducted by
F. F. ROCKWELL

The Editor will be glad to answer subscriber's queries pertaining to individual problems connected with the garden and grounds. When a direct personal reply is desired please enclose a self-addressed stamped envelope

October

TO-DAY the garden is in the height of its glory; the geraniums were never brighter, the begonias have become a miniature forest, the salvias are lines and circles of fire amid the somber colors of late autumn.

To-night—who knows—winter may fling the first line of his advance guard across the land, and tomorrow of all summer's widespread armies there will be left only black ruin.

And what have you done to provide against these disasters, to protect at least a few of your garden favorites from the universal destruction? A few wholesome plants in the house, like minstrels in a besieged castle awaiting relief, will make the long attack of winter pass more quickly, and to the dreary days will lend a spirit of cheerfulness that cannot be duplicated.

If it is worth the time and attention we spend on it to provide a flower garden in summer, when every corner and bank by the roadside offers its quota of blossoms, how much more worth while is it to make an effort at securing a flower garden in winter, when every green leaf is prized.

There is another reason, not less important than that of having flowers in winter, for saving some of the plants from Jack Frost. We want a supply for next summer's flower garden, and not only for economy's sake but also to be sure of

keeping specimens of our favorite plants we must propagate them ourselves. Especially is this true of such as are raised from seeds—petunias, snapdragons and many others having beautiful unnamed mixed hybrids.

Save Part of the Flower Garden

THERE are two distinct ways of carrying plants over. In some cases the plants themselves can be saved—although as a rule new plants give better results—or you can root cuttings of the old plants, and thus make them over into new ones. In some instances the old plants are saved in order to furnish material for cuttings early in the spring. Where this is done the plants are usually just carried through the winter in an almost dormant condition and started into growth by giving more warmth and moisture, in January or February.

Simple as it may seem to dig a plant up out of the garden, put it into a pot, and bring it into the house, not one plant out of fifty so treated, in the ordinary way, will survive. In the first place, it is impossible to take up a plant so growing without badly mutilating its roots—no matter how careful one may be, many of them will be broken and bruised. The plants at the end of a summer's season of blooming are more or less ripe and woody—there is not much active new growth—which is a very unfavorable condition for handling and potting. And in addition to this, the environment indoors is usually much less favorable than that from which the plants are taken. In connection with the shock of moving, it usually proves fatal.

If you have garden plants you desire to save, take every precaution you can. In the first place begin operations as early as possible—the longer the time between taking the plant up and bringing it inside the better.

Make a clean, deep cut around each plant with a knife or a sharp spade, leaving a ball of earth about the size of the pot in which it is to go, or a little larger, as some of the earth will probably get knocked off in the process. If the earth is dry, get it into good condition by water-

ing thoroughly for several days in succession. *Cut the top of the plant back severely.* Do not let buds and flowers tempt you to try to save it all, or most likely you will lose it all. Some soft-wooded plants, like petunias, should be almost entirely cut away, leaving only the stubs six or eight inches long. Geraniums and other stronger wooded plants should be cut back one-third to one-half. If the weather permits, leave the plants in the soil for several days after this pruning of roots and branches. Then take them up with as little pulling as possible; it is always better to cut roots off clean than to pull them out. Pot the plants up, using soil such as is recommended below for repotting cuttings, and see that it is packed firmly into the pot. Give a thorough soaking, and put them in the shade—under a tree or on a corner of the veranda—for several days. Within a week or so they should be sending up new growths, and emitting new white rootlets. Keep them outside as long as possible without risk of freezing, and when you do take them in, be sure to give all the air possible during mild days. By taking pains many of your favorites in the flower garden can be saved.

How to Take Cuttings

THERE will be many plants, however, too big to take up, or in excess of the number one has room for. These



Take the cutting off clean—preferably below a joint. Remove the leaves from the lower half



When first potted the little plants may be close together, but in a week or two they will need to be spaced

need not be lost if you will take the trouble to learn the art of rooting cuttings. It is not a very difficult operation, but if you have never done it, be sure in attempting it to keep track of all the details involved. A cutting is a piece of the plant—usually the end of a shoot or branch or new growth—about two or three inches long. In taking a cutting be sure that the wood is of the right condition of firmness, neither too hard nor too soft. This condition is determined by the snapping test. When the shoot is bent between the fingers it should snap, making a clean break. If it bends or doubles up without breaking it is too old, or too soft, and will not root readily. Take the cuttings off clean with a sharp knife, cutting a little on the slant and preferably just below a joint, but this is not, in most cases, imperative. Remove the leaves from the lower half and shorten back, or cut off the outer halves of the remaining large leaves. This will give you nice, clean, stubby little cuttings, all ready for the rooting medium.

How to Make Cuttings Root

THE simplest and surest way to root cuttings, where only a dozen or two are required, is by the saucer system. Your outfit will consist of a large soup-plate (or any other deep glazed earthenware dish) and some clean, gritty medium-coarse sand. Fill the dish two-thirds full of sand, and make as wet as possible without having water stand on the surface; insert the cuttings around the edge as close as they will go without touching. (A double circle may be put in by placing a small inverted saucer or a block of wood in the center of the dish.) Place the dish in a warm light place, such as a sunny window. *Be sure to keep the sand saturated until the cuttings root*; that is the whole secret of success.

When more cuttings are to be rooted, take a flat (about 12 x 19 x 3 inches is a convenient size); put a layer of sphagnum moss or leaf-mold in the bottom and fill with gritty sand. Wet this down thoroughly and insert the cuttings about an inch apart in rows two to three inches apart. Keep where the night temperature will be as near fifty to fifty-five degrees as possible, and shade on sunny days from nine to three o'clock, as the sand will not be as wet as that in the saucer system, and the cuttings must not be allowed to wilt after they are put in it. If the weather is very hot, spray or sprinkle the tops of the cuttings two or three times during the heat of the day, to prevent wilting. In cold weather the cuttings will root more quickly if the box (or plate) is kept where the bottom of it can receive some direct heat, as on bricks over a radiator—care being taken, of course, not to let the sand dry out.

Potting Off the Rooted Cuttings

WHEN the roots are from a quarter to half an inch long, the cuttings should be transferred to pots. For the

soil use a rich garden loam with enough leaf-mold and sand added to make it both light and friable—so that it can't be squeezed into a ball in the hand. If you cannot obtain leaf-mold, some old spent manure, such as has been used in a hot-bed, will make a good substitute. Use a two-inch pot if possible. Don't stick a little cutting into a three or four-inch pot and expect it to thrive, because the soil will not dry out quickly enough, and will get sour. If large pots must be used, put three or four cuttings in each, around the edge. It will pay to get small pots and do the job properly.

Take the cuttings carefully from the sand, don't pull them out. Fill a pot level full with soil, make a hole with the left forefinger and with the right hand lower the cutting into place. With the thumbs and forefingers enough soil is crowded about the cutting, which is put in to about half its length, to hold it in an upright position. Then give the pot a couple of sharp raps on the bench or table to com-

press the soil, which is further compacted by an even pressure with the thumbs. If the work is properly done, the cuttings will stand up firmly in the soil.

The potted plants are given a thorough watering, and placed where the holes in the bottoms of the pots won't get clogged up, a flat full of coarse gravel or cinders is ideal for this. For several days be very careful to shade during the heat of the day, and if the weather is very hot, be careful also about letting the little pots get dried out, as they will very quickly if left in the bright sunshine. New pots should always be soaked in water until they cease to bubble.

When first potted off the little plants may be placed close together. In a week or two, if they come along nicely, they will need to be spaced. Never let them get crowded. A few days neglect may mean the drawing up choice specimens into useless leggy plants. In a few weeks, if all goes well, your dozen or more little plants will be ready for re-potting, which condition will be indicated by the small white string-like roots that have come through the soil and ramified about the balls of earth inside the pots. Shift without delay to pots a size larger, using the same soil except that a quart of bone flour, or fine ground bone, should be added to each peck of potting soil. Remove the plants by inverting the pot and knocking the edge sharply against the edge of a bench or table. Fill the new pot about a third full of soil, hold the plant in position in the center, and fill in around the ball of roots with new earth, rapping the pot smartly and using the thumbs, as before, to make the soil compact. The surface should be about half an inch below the rim of the pot, to leave a space to hold water when the plants are being wet.

Pots four inches and up in size will require "crocking," that is, giving extra drainage by having pieces of broken pots or other rough material placed in the bottom to keep the hole open.

Give all the air possible without chilling.

A Persistent Dahlia

IN the summer of 1908 our dahlias were so prodigal with foliage and so stingy with blossoms that we got discouraged and left the tubers in the ground to perish with the winter's cold. Imagine our astonishment, the following spring, on seeing a supposedly dead cactus dahlia push its young shoots as bravely through the ground as if it had had the customary winter storage and May planting out. Unless it accidentally got some of the leaves from the neighboring bulb bed, it had had no protection whatever; though doubtless the southern exposure and the fact that it was close to the stone wall of a warm cellar had not a little to do with its survival. Having shown this extraordinary determination to live, this dahlia was left to its own devices and at the time of writing is blooming well after its third consecutive Connecticut winter in the open ground.

H. S. A.



When this photograph was taken the dahlia had been in the ground all winter. It also survived the two succeeding winters



EDITORIAL



THE COST OF HIGH LIVING

IT is a fortunate thing that an official census is taken but once in a decade. As it is, the statistics that flow in a steady bewildering stream from Washington would easily supply editorial subject matter for twice that period of time. With the assurance that we purpose no such utilization of the wealth of figures served up in such varied form by the Government, let us look for a moment at the relative prices of commodities:

	1900.	1910.
Farm products	109.5	164.6
Food, etc.	104.2	128.7
Cloths and clothing	106.8	123.7
Fuel and lighting	120.9	125.4
Metals and implements	120.5	128.5
Lumber and building materials	115.7	153.2
Drugs and chemicals	115.7	117.0
House furnishing goods	106.1	111.6
Miscellaneous	109.8	133.1

Standing forth in bold relief in the list is the increase in the price of farm products. Supplementary figures show that the increase in the prices of the finished products—flour, cotton cloths and the like—is not so large. It would seem, therefore, that the farmer is coming into his own—in fact, that he already has it in his pocket.

MAKE THE LAND PRODUCE

THERE is an obvious moral in the paragraph above: *Grow your own vegetables*. In the suburbs and in the more distant countryside the development along the lines of small building plots is constantly encroaching on the productive land of the market gardener and farmer. The soil that yielded potatoes a decade back is now supporting lawn. Eight of the typical 50 x 100 ft. suburban lots are approximately equivalent to an acre. Taking two-thirds of each plot for the house, lawn, paths, etc., there is left a third for the vegetable patch. One-third of an acre, under intensive cultivation, can be made to produce all the vegetables, potatoes excepted, that twelve people can eat in a year. In other words, then, every eight suburban plots that are not made to produce, sacrifice the vegetable food of twelve people. This is an economic waste of such proportions that, if observed in a man's business, it would be a matter for constant study until rectified. Because it occurs in connection with our home life it passes unnoticed.

However, it is not strictly our mission to attempt a reduction of the present high cost of living. We might even view with equanimity this economic waste in the thought that another form of return was being paid on the land investment—the invigoration that comes from life away from the city—a dividend of health. What really does bother us in this matter is that the dwellers on those much-discussed eight suburban plots are missing something in this life that is really too worth while to be missed. They are not getting their money's worth out of the land—not in tomatoes or beans, but in the actual rejuvenescence of mind and body that comes only to him who digs in the soil. And the by-product consists of vegetables such as cannot be bought from the grocer or the dusty, jouncing cart of the huckster—vegetables in the varieties that are too tender and short-lived for marketing, vegetables that have a flavor above all others because you have raised them yourself.

MAKING EVERY PROSPECT PLEASE

THE first of September last, in the State of New York, was made a day of joyful work by the Good Roads Committee of the Automobile Association of America. On that date a new law went into effect in this State, prohibiting the destruction or de-

facement of milestones, guide posts and public property of like character, and prohibiting also, without the owner's written consent, the defacement of trees and buildings with advertisements. Fifty or more automobile clubs took part in the wholesale destruction of such disfiguring signs as had not been removed before the law went into effect.

The campaign against this particular form of defacing the countryside has been waged for some years by individuals and organizations who preferred Nature unadorned. It has remained, however, for the rapidly swelling ranks of the automobilists to push to a successful conclusion this one engagement on the long firing line. We trust that the noise of battle may be heard afar off, inspiring other States to join the crusade. The ultimate result is not for a moment in doubt—the billboard as we now know it will be consigned among other relics of barbarism within a generation. If we could but make clear to some of our erring brothers the fact that an advertisement defacing a beautiful landscape is the worst possible boomerang against the advertiser and his product, we could hasten the coming of that day.

AN OCTOBER OPPORTUNITY

OCTOBER is a month of renovation inside the house. More and more general becomes the custom of freshening up the interior decorations and furnishings for the winter months. New wall papers and hangings, new rugs and new furniture for a room or two, give a new opportunity for rectifying old mistakes in color or arrangement, or of laying the foundation for some new scheme of both. To but few of us comes the opportunity of furnishing and decorating a whole house at one time. Even when we build anew there are the inevitable handicaps or restrictions imposed by furniture that is too good to give up, rugs that still have many years of service before them, hangings that show no signs of wear, pictures that have been given us in misguided generosity. All have their claims upon us, so that the new house is often disappointing in its perpetuation of past errors. For most of us the problem can be slowly but surely solved by consistent efforts to do a little at a time along carefully planned lines towards an ideal. It is no great hardship to any of us to bring one room up to the standard each fall. Even if the more important rooms have to be completed through inter-family holiday gifts, or the rug problem has to go for another six months, a big stride toward the ideal can be made now. The important thing, of course, is to keep at it. The temptation is strong to lie back on our oars and let things go for another year, but the accomplishment of part of the task is worth some personal sacrifice right now.

TOKONOMA AND CHIGAI-DANA

WHILE we are at the task of making the interiors of our homes conform more closely to the ideal, let us profit by the custom of the Japanese in regard to the display of pictures and ornaments. One end of each of the chief rooms is formed of two alcoves, the *tokonoma* and the *chigai-dana*. In the former is placed the picture of the day, always a subject appropriate to the season or the activities of the host. In the *chigai-dana* is displayed the day's selection of artistic treasures from the fireproof *kura* or "go down." Only the mere faddist among ourselves would attempt to follow this doctrine of simplicity to the letter. For one thing, we have not attained to the delicacy of artistic appreciation that is the heritage of the unspoiled Japanese. But it should serve at least to modify our own carelessness in regard to our pictures and meaningless bric-a-brac. While you are refurbishing that one room this fall, try the experiment of taking out all the pictures and mantel ornaments and putting these back one at a time only as they seem indispensable.



Illustration
is of No. 100

There is nothing more fascinating to the average man or boy than

Tinkering with Tools

and for the man who is really handy with tools a present of one of our Combination Benches and Tool Cabinets will give him more pleasure than anything else you could select. It is a handsome oak cabinet containing 95 of the finest tools made and when open is a complete bench with vise ready for immediate use.

For one less expert, or for the boy, we suggest one of our smaller cabinets. All tools are the highest grade standard mechanics' tools, arranged in convenient sets for home use. The quality is the same in all. The higher priced cabinets are larger and contain more tools.

This Christmas or this Birthday give him one of our Combination Benches and Tool Cabinets, or a smaller Tool Cabinet and a Manual Training Bench.

No. 47	21 Tools	. . \$ 7.50
" 52	24 "	10.00
" 53	36 "	15.00
" 54	40 "	20.00
" 55	52 "	30.00
" 100	95 "	85.00

We are pioneers in the sale of high grade tool outfits for home use; every set bears our guarantee of quality.

Order direct (we have no agents) or send for Catalogue No. 2941.

HAMMACHER, SCHLEMMER & CO., NEW YORK SINCE 1848 4th Ave. and 13th St.
HARDWARE, TOOLS AND SUPPLIES

Thorburn's Bulbs

Hyacinths, Darwin and other Tulips, Narcissus and Crocus, Easter Lilies and hardy Japan and Native Lilies. English, Spanish and Japan Iris. Freesias, Calochortus and Trilliums, and all other Native and Foreign Bulbs and Roots in endless variety.

The Largest Assortment in America

CATALOGUE NOW READY
MAILED FREE FOR THE ASKING

J. M. THORBURN & CO.
33 Barclay Street Box 2 New York

SHERWIN-WILLIAMS PAINTS & VARNISHES

To bring out the natural beauty of shingles and preserve them from the weather, use S-W Preservative Shingle Stain. Made with creosote, the best wood preservative known. See samples at Sherwin-Williams dealers, showing stain on wood.



Address all inquiries to The Sherwin-Williams Co., 627 Canal Road, N.W., Cleveland, Ohio



Asbestos "Century" Shingle Roof—Residence Frank C. Childs, Lexington, Mass.

ASBESTOS "CENTURY" SHINGLES

"The Roof that Outlives the Building"

IF you want the fullest possible use of the top floor of your house you must roof it with Asbestos "Century" Shingles.

It's the only way to avoid the extremes of heat and cold that bother you with the ordinary roofs.

Asbestos "Century" Shingles are very efficient heat insulators. They are made of reinforced concrete, which is celebrated as a non-conductor of heat and cold.

From every consideration, it's worth your while to look into Asbestos "Century" Shingles before building, rebuilding or altering.

They are indestructible by weather. They are the best preventive of fire you can give your home. They last forever—without painting or repairs.

And they cost no more than you expect to pay for a first-class roof.

You can get Asbestos "Century" Shingles in shapes to suit any architectural style—in several sizes—and in three colors: Newport Gray (silver gray), Slate (blue black) and Indian Red. Ask your representative roofer about this indestructible roofing—or write us. Send for Booklet C, "Points on Roofing." It will settle your roof problems to your great satisfaction.

The Keasbey & Mattison Company

Factors

Ambler, Penna.

Branch Offices in Principal Cities of the United States,
and London, England.

What Varnishes Really Are

(Continued from page 232)

outdoor work, the surface is built up with varnish, successive coats being applied until all crevices are filled. Each separate coat is sandpapered lightly until the last, which is left to finish with its own natural gloss. The greatest enemy of varnish is sunshine; due to its powerful deteriorating effect, outside doors, etc., should be varnished yearly, while interior trim if well varnished in the beginning will last from ten to twenty years.

Varnish holds a unique place in relation to paints. Our usual thought of varnish is as a finishing touch; but contrariwise, the outside of a new house should first receive a coat of heavy shellac varnish. This is for the purpose of trying to stop up the knotholes in the wood. Even in dry wood, the pitch in the knots will often ooze out, and in time discolor and soften the paint.

The prevention of this oozing of pitch is a great house-painting problem. Nothing has yet been discovered which acts as a sure preventative; varnishing is the best known treatment (unless one will leave the house unpainted for a year to give the pitch a chance to harden or wash away in the rains). After the varnish is dry, the paint is applied.

Varnish is frequently used as a constituent part of paint for interior woodwork, instead of as a finish. A quick-drying oil paint is generally used, to which a portion of varnish has been added, replacing the oil, forming what is known as a gloss or luster paint. This makes a serviceable finish. For a finer finish enamel paint is used, of which varnish is the vehicle or liquid "spreader."

A good general rule for the drying of varnish, and also of paint, is to note the time which elapses from the application, when it is a liquid, to the time it becomes firm, but is still sticky. Before applying another coat allow for drying at least *five* times the number of hours this setting process has consumed: for instance, if "set" in ten hours, fifty hours at the least should elapse before the second coat is applied—much longer in the case of quick drying shellac varnishes. This rule should be lengthened wherever possible, for the longer the coat is left to dry, the better for ultimate effect and service.

In using varnish over a wood stain, the same method of application is used as over any plain woodwork. The use of a water stain to dye woodwork is very effective for large or open grained woods. The stain merely dyes the wood; and after its application the grain is filled with a colored paste "filler." Striking effects are secured in this way, as the filler is a different color from the background, but a harmonizing one. The transparent varnish is applied over the stain and filler.

As before mentioned, varnishing is almost a fine art, and too much attention cannot be paid to details. But if directions are carefully followed, results are sure to be satisfactory.

LIBERT'S Holland ARTS & Dutch CRAFTS

BEAUTIFUL NEW STYLE BOOK MAILED FREE
Send for it today and read its interesting history of this charming style from the 15th Century to the present time. It illustrates over 300 patterns of our Holland-Dutch Arts & Crafts and "Flanders" Furniture, and shows—with colored plates of model Arts & Crafts rooms, what tasty and harmonious effects can be obtained at small expenditure.

WRITE FOR OUR STYLE BOOK
before selecting any more furniture—it will show you just what you want—furniture that is artistic and comfortable, and made so well that it will serve several generations. Ask your local dealer to show you "Libert's Arts & Crafts," and see our trade-mark branded into the wood. If he cannot supply you, send us his name and we will send you the address of our associate distributor nearest you.

CHARLES P. LIBERT COMPANY
Grand Rapids, Mich. Dept. K Holland, Mich.

It is stated by expert varnishers that wood to be varnished should never be oiled before filling. Varnish acts as a preservative, filling pores of the wood and making them air tight—unless it should crack and admit moisture. Therefore the important thing is to apply a good varnish that does not crack.

The finishing of inside woodwork is of course a much more particular process than that for outside.

A good house varnish should be dry to the touch over night at summer temperature in dry weather, and should stand a week before the second coat is applied. With a thin soft varnish the application is best made by first brushing quickly with the grain of the wood, then against it, and then with the grain again. This insures uniformity in the coating.

The average person knows in a general way the difference between hard and soft wood; but nothing regarding the grain. In varnishing and painting the differences of grain are important, and the terms "open grain" and "close grain" are used. All woods are of course porous; those having small pores are "close grained," like pine, cypress, cedar, birch, cherry, maple and whitewood. The "open grain" woods, such as chestnut, oak and ash, have large pores. Good results are more difficult of achievement in finishing open grain woods—hard and soft—than in the close-grain. The reason is obvious; open grained woods have the grain carefully filled with a "wood filler" or "primer," a sort of paste paint or shellac. This filler is usually thinned with turpentine, and the mixture is almost colorless; if desired to stain the wood the filler may be colored with an oil stain. The filler is thoroughly rubbed in with a stiff brush, and the surplus removed with excelsior by rubbing against the grain. Use wood sticks to clean out corners; never steel tools. The filler should be allowed to dry at the least twelve hours.

If the pores of the wood are not well filled before applying the varnish, they will show through all subsequent coatings, and the finish will be uneven.

The first coat of varnish over a filler is apt to leave the wood slightly rough. There are several good methods of procedure after the first coat is applied. After it is dry, in from five to ten days, the first coat may be rubbed with curled hair or excelsior to remove the gloss before applying the second coat. The second coat is lightly rubbed with fine sandpaper or gloss paper after rubbing with curled hair. If the third coat is the last (four coats are better) the natural gloss may be preserved as a finishing, or it may be rubbed with felt saturated with water and powdered pumice, to make a dull or flat finish, which is washed with clean water and dried with two rubbings of chamois skin. The natural gloss finish is supposed to be more durable than the dull finish.

Another method is to use sandpaper on the first coat of dry varnish; the second to be rubbed with powdered pumice and water. Water helps to harden the sur-

The gracious art of entertaining
knows this invariable rule—

NABISCO Sugar Wafers

should be served.

Like the last delicate touches
of the painter's brush, they add
charm, delight, completion.

In ten cent tins

Also in twenty-five cent tins

NATIONAL BISCUIT COMPANY



DURABLE AND ARTISTIC ROOFING



Residence of W. T. Phillips, San Mateo, Cal.
Covered with Meurer's Metal Tile

Meurer's Metal, Spanish and Mission Tiles

The Ideal Roof Covering
made in tin, galvanized and copper

MEURER BROTHERS CO.
MANUFACTURERS

575 Flushing Ave.

Brooklyn, N. Y.

WORKS, Washington, Penn.

130 East 129th St.,

New York City



Vitreous Cisterns

MOTT'S PLUMBING

OUR latest contribution to modern bathroom equipment is the vitreous porcelain cistern.

This snow-white cistern is made in one piece of vitreous porcelain ware; glazed inside and out. It is sightly, non-stainable, easily cleaned and enduring.

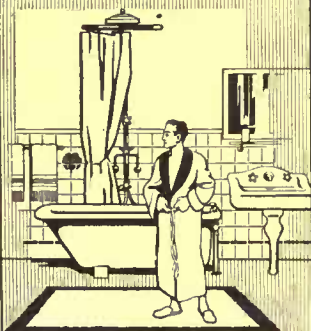
It obviates the defects of the wooden cistern with metal lining—the peeling and discoloration of the exterior varnish—the corrosion and leaking of the inner metal tank—warping of the wood itself. The difference in cost is slight.

MODERN The complete line of Mott products PLUMBING includes plumbing fixtures for every conceivable purpose. Our Booklet, "Modern Plumbing", contains illustrations of 24 bathroom interiors ranging in cost from \$74 to \$3,000. Sent on request with 4 cents to cover postage.

THE J. L. MOTT IRON WORKS

1828 OVER EIGHTY YEARS SUPREMACY 1911
FIFTH AVE., and SEVENTEENTH ST., NEW YORK

BRANCHES: Boston, Chicago, Philadelphia, Detroit, Minneapolis, Washington, St. Louis, New Orleans, Denver, San Francisco, San Antonio, Atlanta, Seattle, Portland (Ore.), Indianapolis, Pittsburgh, Columbus, O., Kansas City, Salt Lake City.
CANADA: 138 Bleury Street, Montreal



face, and the pumice cuts the gloss to insure the flowing of the finishing coat. Rubbing with rotten-stone and water makes a bright polish or finishing coat. For an "eggshell" finish, the final coat is rubbed with powdered pumice and pure raw linseed oil.

Even four coats of varnish make a sheet only as thick as writing paper. It takes from six to nine hundred coats, experts say, to build up a surface an inch thick.

All ready-made varnish leaves the factory ready for use, and if good results are desired, the goods should be used as received. Sometimes varnish in a barrel will get a little heavy by standing when the vent is left open, permitting evaporation. In such a case a small quantity of turpentine, added at least twenty-four hours before using, should not be detrimental; but thinning under other conditions is inadvisable.

Indoor varnish should not be applied when the temperature of the room is below 46 degrees F. Cold will chill it so it will not flow evenly, and its drying will be greatly retarded. Uniform summer heat of at least 70 degrees is desirable until the varnish has set. Exterior varnish should be applied before noon during cool weather, so it will set before the chill which comes at sunset.

A shellac finish is a handsome one, but as eight to twelve coats are required for a first-class job, it is expensive on account of the labor. It makes a handsome and lasting finish for interior trim, and also a good floor finish. Never use shellac about a fireplace where it will be very hot, as it may melt and blister.

Floors should be in perfect condition before applying the first coat of varnish, for every little scratch and imperfection will show. Wash as little as possible before the first coat of varnish is applied; sandpaper will answer better in most cases of new wood. If there are indications of sap, then a coat of shellac should be given the wood, which when dry should be well sandpapered to remove the shellac from the fibre, but to leave a coating in the pores. The floor should be absolutely clean and dry before applying the finish and the room free from dust. There should be no sweeping anywhere in the house to raise dust, until the varnish sets.

In finishing old floors that have been waxed, the wax must be entirely removed. This may be done by cleaning the floor thoroughly with naphtha, using a stiff scrubbing brush.



A Shaded Tulip Border

(Continued from page 217)

ender, lilac, heliotrope and violet, from the delicately tinted Kate Greenaway to the deep bluish purple of Ronald Gunn, said to be the bluest of the Darwins.

We planted our bulbs on the 15th of November, making a trench six inches

The Charm of Your Garden

Pompeian Stone Furniture reproduced from the masterpieces that have made the Old World gardens famous, add a charm to your garden that is a source of continued delight.

The bench illustrated is on the grounds of Mr. F. H. Humphreys, Morristown, N. J.

Our catalogue O, of Garden and Hall Furniture mailed on request. Booklet K, "City back yards," will appeal to city dwellers.

THE ERKINS STUDIOS, Inc.

226 Lexington Ave. - - - New York City.

Factory: Astoria, Long Island.



deep, close to the edge of the lawn, and setting the bulbs six inches apart.

We had, as a rule, sixteen bulbs of a kind, which gave us eight on each side of the garden.

In the spring they all came up very evenly, and on the first day of May many of them were showing their color in good full buds. They grew rapidly and by the middle of May were all in full bloom, each plant holding its beautiful cup proudly on stiff, strong stems.

The garden appeared to be decorated with a line of many tinted electric lights or partly colored goblets of nectar. The flowers opened widely in the sun at mid-day and closed to oval cups at night.

In our case, we had only a single row of bulbs; the same color scheme could be carried out by multiplying the rows, making the border wider and shorter if desired, according to the space to be filled.

In many cases, also, we were governed by the price of the bulbs, as we had set a limit on the amount we would put into the border. Possibly some of the higher priced bulbs might have given a better result, but we were quite well satisfied with our experiment, and have the pleasure of knowing that it will increase in beauty and width with every passing year.

We succeeded in securing great variety in color, but so placed and arranged that the colors did not clash, and the effect was artistic and harmonious throughout.

The average height of the tulips was about twenty-five inches, but some varieties exceeded this. Several of the Dreams reached a height of thirty-seven inches, by actual measurement; and Baronne de la Tonnaye and many others measured thirty-three inches and over.

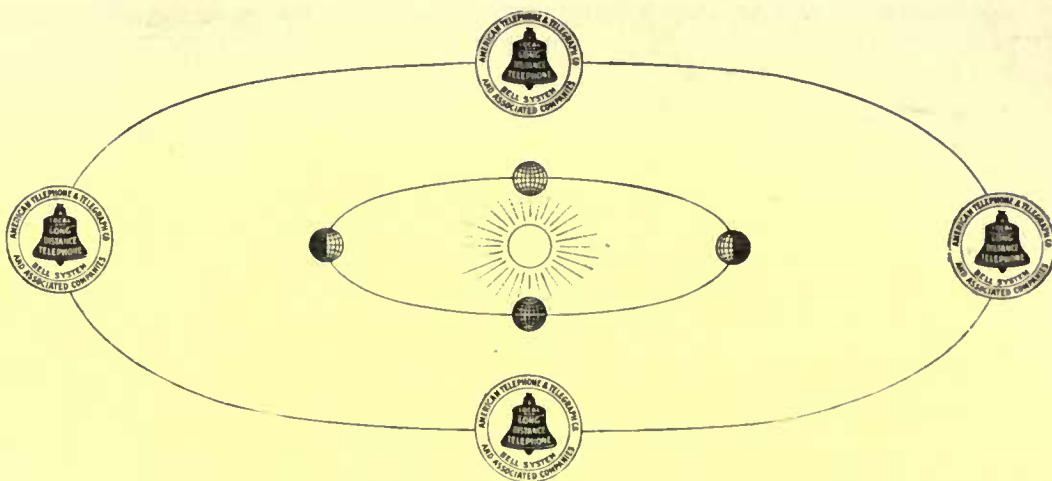
Our little garden was full of color during the entire month of May, when the other flowers were coming on, and on the first of June many of the tulips were still beautiful.

Over and among the tulips we planted our sweet alyssum seeds for the white summer border, which was well under way before the tulips disappeared.

The following is a list of the tulips in order of planting, with color and price.

Darwins except where indicated.

1—La Tulipe Noire, the famous "black tulip"...	Each. \$0.35
2—The Sultan, maroon-black.....	.05
3—King Harold, dark blood-red shaded maroon...	.05
4—Cardinal, dark, rich cardinal.....	.05
5—Giesneriana Major (cottage), crimson-scarlet...	.03
6—Farnseombe Sanders, fiery scarlet.....	.10
7—Europe, orange scarlet.....	.05
8—Glow, brilliant glowing vermillion.....	.05
9—Orange Beauty (cottage), orange red, flushed with gold.....	.04
10—Gala Beauty Columbus (cottage), vermillion striped with gold.....	.10
11—Mrs. Moon (cottage), orange yellow.....	.07
12—Bouton d'Or (cottage), clear golden yellow.....	.03
13—Vitellina (cottage), pale canary yellow.....	.05
14—Painted Lady, creamy white.....	.05
15—White Queen, white, tinted with rose.....	.05
16—Gretchen, soft blush rose.....	.05
17—Clara Butt, soft rosy pink.....	.05
18—Loveliness, soft rosy carmine.....	.05
19—Baronne de la Tonnaye, carmine rose, shading to pink.....	.05
20—Queen of Roses, carmine rose.....	.05
21—Edmee, rich cherry red.....	.10
22—Sieraad van Flora, vivid rose red.....	.06
<i>Lavender Tones.</i>	
23—Kate Greenaway, white, suffused with lilac.....	.05
24—Zephyr, violet rose, white centre.....	.06
25—Dream, soft lilac with claret purple interior.....	.05
26—Rev. H. Enhank, vivid heliotrope lilac.....	.05
27—Ronald Gunn, "The bluest of the Darwins"...	.06



Comparison of the Distance Traveled by Earth and Bell Telephone Messages

The Orbit of Universal Service

In one year the earth on its orbit around the sun travels 584,000,000 miles; in the same time telephone messages travel 23,600,000,000 miles over the pathways provided by the Bell system. That means that the 7,175,000,000 Bell conversations cover a distance forty times that traveled by the earth.

When it is considered that each telephone connection includes replies as well as messages, the mileage of talk becomes even greater.

These aggregate distances, which exceed in their total the limits of the Solar system, are actually confined within the boundaries of the United States. They show the progress that has been made towards universal service and the intensive intercommunication between 90,000,000 people.

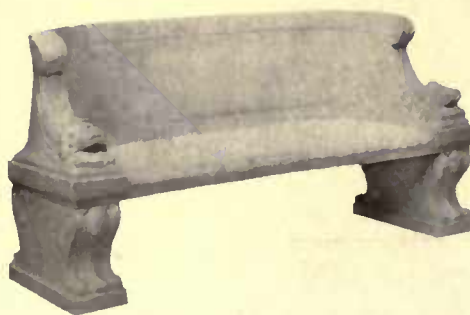
No such mileage of talk could be possible in such a limited area were it not that each telephone is the center of one universal system.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY AND ASSOCIATED COMPANIES

One Policy

One System

Universal Service.



BENCHES

When properly placed produce the desired artistic effect to the garden or lawn.

We furnish them hand carved and made of marble, Indiana limestone or our regular catalogued goods, which are made of composition stone. Catalogue on request.

TOGNARELLI & VOIGT CO.
2302 Chestnut St. Philadelphia, Pa.

"Standard"

GUARANTEED PLUMBING FIXTURES

BECAUSE of their durability and efficiency "Standard" guaranteed plumbing fixtures never cease to add value to your building investment, as long as your building endures. Their comfort and convenience are a constant source of satisfaction.

Build permanent sanitary protection into your home by specifying, *not verbally, but in writing* (using catalogue numbers), "Standard" plumbing fixtures, and seeing to it personally that they, and not substitutes, are installed. Each "Standard" fixture bears a guarantee label for your protection. It is the assurance to you of modern and sanitary equipment of the highest quality.

Genuine "Standard" fixtures for the Home and for Schools, Office Buildings, Public Institutions, etc., are identified by the Green and Gold Label with the exception of baths bearing the Red and Black Label which, while of the first quality of manufacture, have a slightly thinner enameling, and thus meet the requirements of those who demand "Standard" quality at less expense. All "Standard" fixtures with care will last a lifetime. And, no fixture is genuine *unless it bears the guarantee label*.

Send for a copy of our beautiful catalog "Modern Bathrooms." It will prove of invaluable assistance in the planning of your bathroom, kitchen or laundry. Many model rooms are illustrated, costing from \$78 to \$600. This valuable book is sent for 6 cents postage.

Standard Sanitary Mfg. Co.

Dept. 40

PITTSBURGH, PA.

New York.....35 W. 31st Street
Chicago.....415 Ashland Block
Philadelphia.....1128 Walnut Street
Toronto, Can.....59 Richmond St., E.
Pittsburgh.....106 Sixth Street
St. Louis.....100 N. Fourth Street

Nashville.....315 Tenth Avenue, So.
New Orleans, Baronne and St. Joseph Sts.
Montreal, Can.....215 Coristine Bldg.
Boston.....John Hancock Bldg.
Louisville.....319-23 W. Main Street
Cleveland.....648 Huron Road, S. E.

London.....53 Holborn Viaduct, E. C.
Houston, Tex., Preston and Smith Streets
San Francisco, Metropolis Bank Building
Washington, D. C.....Southern Bldg.
Toledo, Ohio.....311-321 Erie Street
Fort Worth, Tex., cor. Front and Jones Sts.



Furnishing and Decorating the Nursery

(Continued from page 227)

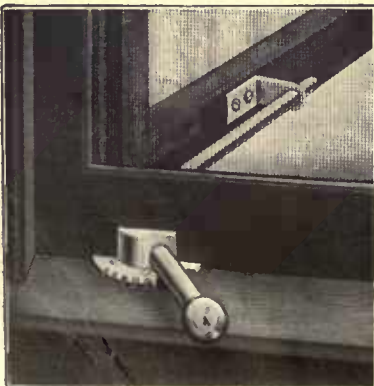
summer rooms or to be carried outdoors.

In spite of the fact that the little white bed is always associated with the child's room in story and song, to say nothing of the popular imagination, there are various kinds of brass and wooden beds made in small sizes that are thoroughly in keeping with one's idea of a typical nursery. The white enamel beds, which may be had as plain or as elaborate as one desires, are always dainty, and have the advantage of harmonizing perfectly with furniture and hangings of almost every description. Brass beds have the same characteristic, but they are much more expensive than those of iron, and seem to require rather more elaborate surroundings. The newest brass beds for children are quite low, only about half as high as the ordinary bed, which is a distinct advantage, as it is much easier for the child to climb into, and less dangerous in case he falls out.

A recently designed wooden bed of attractive appearance shows severely plain lines in the head and foot boards, and in the sides long narrow panels are cut out, through which the covering of the box spring is seen. This bed is made only to order, and is intended for elaborately decorated rooms in which a definite color scheme is carried out. It may be had in any desired width and stained any color to match the other furniture, while the box spring and little pillow and mattress are covered with the same material as the draperies of the room.

Furniture of a special size for children's rooms is made in a design that is substantial and handsome, by the manufacturer of a well-known and widely used type. There is a wardrobe just five feet high, with compartments for hats, clothing and shoes; a bureau twenty-nine inches high, with a twenty-inch mirror on it; a bed with high sides, the simple decorations of which match those of the bureau; rocking chairs and straight chairs with leather seats, a settle and tables of different sizes and shapes. Nothing could be more attractive or complete than a room furnished in this way for a child of six or seven years who has outgrown the daintier surroundings of the nursery. It has all of the dignity of a well-appointed grown-up room, but with everything in proportion to the size of its owner.

Even washstand sets, suitable as to shape and decoration, may be had for the child's room in which no detail is to be omitted. They are little if any smaller than the usual sets, but the decorations are in keeping with those of the other appointments, and the pitchers are designed with a view to their being handled easily by small hands. They are not unlike milk jugs in shape, with a substantial handle over the top and another at the back, so that there is small chance of their slipping while in transit, and the mouth is a definitely



WHEN AN ARCHITECT

Builds his own home he wants the best of everything. MR. ERNEST GUILBERT, City Architect of Newark, N. J., began right by making all his window casements swinging out.

Then he equipped them with our famous "BULL-DOG" ADJUSTERS in solid Brass to last a lifetime. Neat, strong and simple, and operated easily from INSIDE THE SCREEN with one hand.

Our free booklet tells all about casements.

CASEMENT H'D'W'. CO., 175 N. State Street, Chicago

formed one that will not fail to pour in the direction intended.

For a comparatively small amount a room may be fitted up with enough distinctively juvenile furnishings to impart individuality and to give the child a sense of possession that it will never have in grown-up surroundings. Even though circumstances are such that it has not had an elaborate nursery, as soon as a child is old enough to have a room of its own there is no reason why the furnishings should not be in keeping, and with the expenditure of a little money a dainty and attractive room may be arranged. High-priced beds and other pieces of furniture are by no means necessary, and as is often the case, the most reasonably furnished room may be the most satisfactory if a little ingenuity and good taste are brought into service.

Thirty to thirty-two dollars can be made to cover the cost of wall-paper, curtains, bed and mattress, a rug and a bureau, all in sizes and designs suitable for children. The wall-papers in juvenile patterns are not expensive, and the cost of papering a room of average size would be about five dollars. A little white iron bed may be had for as low as five dollars, with seven dollars additional for the mattress, and a rug 3x6 feet in size with a decorative border is \$3.50. A bureau of small size, such as comes in an inexpensive grade of the so-called antique oak, costs about \$8.00. For the very reason that the furnishings of the room are only temporary, and soon to be outgrown and discarded, it is quite satisfactory to buy a cheap grade of furniture whenever possible, if price is a consideration. A small bureau is less expensive than one made especially in a child's size, and is equally practical if not so substantially made. Such a bureau can be done over in white enamel to match the bed, or in any dark color that may be preferred in place of the shiny oak finish.

For curtains that hang straight from the top of the window to the lower edge of the sash, scrim at twenty-five cents a yard would cost two dollars. Allowing four yards for each of two windows, and enough printed cretonne to make a decorative border, it would cost a dollar and a half additional.

These figures are the very lowest for which a child's room can be fitted up, but even with everything of the most inexpensive grade it will give more real pleasure than one on which a much greater amount has been spent if the room is nondescript in its furnishings and fails to impress the child with a sense of ownership.



Planting the House Border

(Continued from page 237)

around the porch and close to the house.

In determining on the grouping you will use on your grounds, the location of the beds should govern your selection.

HOUSE AND GARDEN

"Hello dear! Been afraid?"

"No—not since

you carried that little Key—and I have known the absolute security of a Yale Cylinder Lock. It's the most comforting thing we ever bought."

Yale Cylinder Locks and Latches furnish automatic security for all sorts of doors in all sorts of circumstances.

They are impregnable guardians of life and property.

Say "Yale" to your dealer and then insist on getting it.

Every architect knows Yale Products and every house builder should have our book about Yale Hardware in the Home—free for the asking.

The Yale & Towne Mfg. Co.

9 Murray Street, New York, U. S. A.

The Makers of Yale Products,
Locks, Padlocks, Builders' Hardware,
Door Checks and Chain Hoists.

Chicago: 74 East Randolph Street.
San Francisco: 706 Phelan Bldg.

YALE



Deciduous Shrubs that will Thrive in Shady Places

FOR FALL PLANTING

ARALIA PENTAPHYLLA, will grow to 6-8 ft.
FORSYTHIA FORTUNEI, will grow to 8-10 ft.
PHILADELPHUS CORONARIUS (Mock Orange), will grow to 10-12 ft.
RHODOTYPUS KERRIODES, will grow to 4-5 ft.
RUBUS ODORATUS (Flowering Raspberry), will grow to 4-5 ft.
SYMPHORICARPUS RACEMOSUS (Snowberry), will grow to 4-5 ft.
KERRIA JAPONICA, will grow to 4-5 ft.
SYMPHORICARPUS VULGARIS (Indian Currant), will grow to 3-4 ft.

Any of the above, in well furnished, strong-rooted 2-3 ft. plants at 35c each, or \$25.00 per 100. No agents—we sell direct to you. Write for personal advice.

NORTHERN NURSERIES COMPANY

525 Cutler Bldg.

Rochester, N. Y.

Samson Spot Sash Cord



WHEN you build or when you replace broken window cords, see that Spot Cord is used. Will outwear common roughly braided cord many times over, because it is made of extra quality stock and guaranteed free from imperfections of braid or finish. Look for our trade-mark.

THE SPOTS ON THE CORD

Send for samples and tests. Carried by all hardware dealers.

SAMSON CORDAGE WORKS, BOSTON, MASS.


ORBIN

Hardware for Homes of Refinement

The kind for particular people. The decorative scheme of the builder can be carried out in the hardware and a harmonious effect secured in any school of art.

Sold by the best dealer in any city.

Send for publications.

OK16, Corbin Colonial Hardware
OK17, Corbin Wrought Hardware
OK80, Corbin Specialties

P. & F. CORBIN,
NEW BRITAIN, CONNECTICUT

P. & F. CORBIN P. & F. CORBIN
of New York of Chicago

P. & F. CORBIN
Philadelphia



The evergreens, broad-leaved and coniferous, should have a north, northeastern or eastern exposure. This gives them shade from sun and also insures a maximum amount of moisture. As you get toward the south, southwest and west the shrubs and perennials will be found better suited.

Of course the final decision rests with individual conditions; rhododendrons will thrive on the south side in the event of their getting partial shade, though this is a contradiction to usual demands. Quite often there are angles formed by offsets in the house into which the setting of a plant is needed to soften the sharp appearance. Where the height of such plants is not restricted to a few feet, one may use with good effect the flowering English hawthorns, the Persian lilac, *Styrax Japonica* and *Viburnum tomentosum* or *plicatum*.

When dwarf-growing specimens are needed the Japanese maples are admirably suited, also the spiraea Van Houttei, Regel's privet, etc.

As an additional feature possible to include in any or all of these groupings, the naturalizing of daffodils or narcissus along the edge is decidedly fine. They are up so early in the spring and give forth a wealth of bloom. Unusually good results follow the planting of them in the foreground of evergreens. The latter form a dark background for their bright flowers.

In establishing beds of rhododendrons and other broad-leaved evergreens much harm is frequently done by spading the ground. These plants root near the surface and such treatment destroys the feeding roots. The rotting leaves and wood in the mountains, where these plants grow wild, gives food without the disturbance to the roots to which I refer. Mulch the ground around these plants; let it remain or rake it off in the spring, and should a stirring of the ground be necessary use a fork and exercise care.

It is timely to dwell on the question of vines in this article, as they are a part of the exterior decoration of the house. Where clinging vines are needed for surfaces where there are no trellises, the selection is narrowed down to a few. The most popular and worthy vine is the Japanese or Boston ivy, *Ampelopsis Veitchii*. It appears attractive from spring until autumn, particularly during the latter season, when the foliage takes on such wonderful hues. The English ivy is splendid for continual effect, as it has evergreen foliage, but unfortunately will not thrive in every location. Where good, deep, rich soil is to be had a north or northeastern exposure is favorable, but toward the south and west the winter siege of hot sun scalding is too much for the glossy evergreen foliage.

The small, evergreen-leaved *Euonymus radicans* is very effective and not as sensitive to the sun's rays as the English ivy. It is slow of growth, though in time will make 30 or 45 feet of growth.

For the porch or trellis there are a num-



Brainerd & Leeds, Architects, Boston.



Old Colonial Mansion, Newburgh, N. Y.



FOR ALL CEMENT, PLASTER AND BRICK SURFACES

DEXTER BROTHERS PETRIFAX CEMENT COATING

waterproofs without destroying the texture of the surface. Will not crack, chip or peel off.

Fills the pores and cracks of exterior walls, so that moisture cannot penetrate and cause damage or unsanitary conditions. Gives uniformity of color. Unaffected by climatic changes.

Petrifax is extensively used on interior walls and ceilings of residences, hospitals, public and office

buildings. Produces a waterproof, sanitary, washable finish that is practically indestructible.

Prevents floors of garages and factories from dusting and oil spotting.

Petrifax is made in white and several shades.

Ask for booklet and any special information you may desire.

Dexter Brothers Co., 113 Broad St., Boston, Mass. 1133 Broadway, New York 218 Race Street, Phila., Pa.

Also Makers of Dexter Brothers English Shingle Stains

AGENTS: H. N. Hooker Co., Chicago; N. B. Totten, St. Louis; Sherman Kimball, San Francisco, Cal.; Hoffschlager & Co., Honolulu; AND DEALERS

ber of charming vines and climbers. Roses in great variety, honeysuckles, akebia, clematis in variety and aristolochia or Dutchman's pipe.

In conclusion let me add one word of caution concerning grouping. As the porch finish must necessarily be stiff and formal, overcome the effect and produce harmony by a natural grouping of your plants. Do not make straight beds parallel with the porch, unless ground is decidedly limited, and arrange the tall shrubs in the background in a way that will tend to distribute differences in height and give an informal effect to the finished planting.



The New Wall-Papers

(Continued from page 220)

In this hasty review of salient new papers, we have not paused to consider details of coloring. Each season brings to the fore some favored tone, although it is not arbitrary. One chosen shade for the months ahead has been alluded to; it is a soft, warm, quiet mulberry. Happily it is apt to suit the complexion, a consideration to be thought of in wall-papers as in gowns. Blues also have been mentioned, and these enjoy growing favor. Yellows and browns are always good, while off-shades, like burnt orange, have a special decorative value.

Art in wall-papers has developed to such a degree that their hanging is no longer a simple matter. The use of papers together, the cutting out and applying of crowns and motifs, the adaptation of panels to wall formations and even pictures—these and other elements require a high degree of taste and skill for their proper handling. All of this tends to elevate this interesting and worthy craft in all its departments, not only in that of the designer and manufacturer, but in that of the paperhanger as well. No doubt very fine achievements along these lines will be witnessed in the future; but without going into them, we are sufficiently glad to avail ourselves of the charming opportunities of the present.



The Twelve Best Perennials to Plant Now

(Continued from page 223)

not only for their spicy June bloom, but because their bluish green foliage is beautiful even in winter. On slightly raised ground the plant endures indefinitely, but after a few years it is better to replace with new stock. For this I prefer cuttings, though seed brings new markings. After a while, cuttings will be so numerous that it will be possible to line a walk with the pinks, or make a row of them in the vegetable garden for bouquet use.

When the gorgeous spires of the tall

There need be no such thing as a cold room in any house if a steam or hot water heating equipment of the right kind is properly installed.

The modern house is steam or hot water heated. No other method is so healthful, so easily cared for, so dependable, or so economically secured. Study house-heating before you plan the heating equipment of your new home, or change the equipment you have.

Post yourself on Pierce Boilers and Radiators. Go to the steam-fitter who handles the Pierce line and have him explain the construction of a Pierce Boiler—its durability, its simplicity of operation, its fuel economy, and its wonderful steam or hot water producing ability. And, as a beginning, send for our free Heat Primer,

"What Heat for Your House?"

A book that tells in simple language all about all kinds of heat, and shows the way to get all the clean, healthful heat you want at a minimum cost.

Pierce, Butler & Pierce Mfg. Co., 242 James Street, Syracuse, N. Y.
Showrooms in Principal Cities

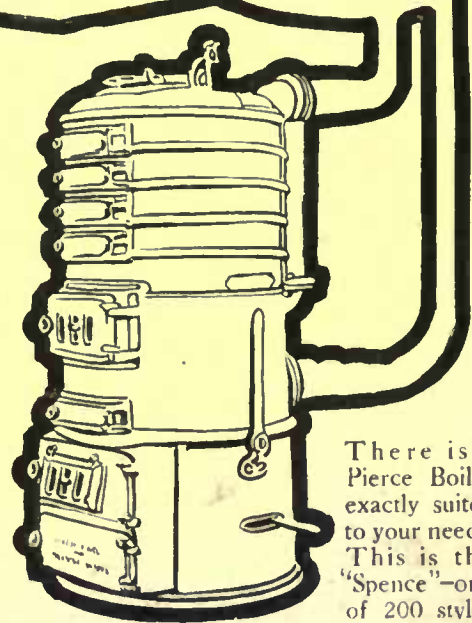
What Heat for your House?

A Primer for the man who is about to build a new house or make an old house comfortable

Pierce Boilers and Radiators



PIERCE MARK



There is a Pierce Boiler exactly suited to your needs. This is the "Spence"—one of 200 styles



Two layers of glass instead of one

Between the two layers of glass is a $\frac{3}{4}$ inch transparent blanket of dry, still air—that takes the place of mats or boards—that permits the plants to get all the light all the time.

Have fresh vegetables and flowers when they are luxuries

Last season amateurs were phenomenally successful with fresh lettuce, radishes, and violets all winter; cabbage, cauliflower, beets, tomato, pepper, and sweet potato plants ready to set out as soon as it was warm outside.

SUNLIGHT DOUBLE GLASS SASH CO.,

Greater pleasure and profit in winter gardening

With Sunlight Double Glass Sash you eliminate all the drudgery of getting out in the wet, cold or snow to cover or uncover beds

GET THESE TWO BOOKS

One is our valuable free catalog. The other is by Prof. Massey, an authority on hot-bed and cold-frame gardening. In it he tells in an interesting and instructive manner how to make and care for the beds, what and when to plant.

Send 4c in stamps, and we will send you the two books. Do it now.

944 E. Broadway,



Write today
LOUISVILLE, KY.

CAN YOU THINK OF ANY HARDER TEST FOR WOOD THAN GREENHOUSE USE?

You know ordinary wood in greenhouses lasts *not over 4 years*.

Zero on one side, hot humidity on the other, constant contact with wet rich earth and compost, constant sprinkling and sweating, all combine in an invitation to hurry up and rot.

NEXT TO THE GROWTH OF THE PLANTS THEMSELVES
THE BUSIEST THING IN A GREENHOUSE
 is the decay-tendency of the wood it is mostly made of.
THOSE WHO MAKE GREENHOUSES A BUSINESS



"THE WOOD ETERNAL"

One of the largest greenhouse manufacturers, J. C. Moninger Co., Chicago, says: "We first began using Cypress *exclusively* for greenhouse construction in 1885, using it previously in conjunction with pine. The greenhouses then built with Cypress are being used today by their owners and the wood is found *perfectly preserved and free of any decay or rot.*" Figure it out yourself.



WRITE TODAY for VOLUME 3 of the CYPRESS POCKET LIBRARY, WITH 20 PAGES of Valuable Guidance for Amateur Greenhouse Folks. (Sent PROMPTLY and no charge.)

"WOOD THAT WILL STAND THE GREENHOUSE TEST WILL STAND ANYTHING," SO INSIST ON CYPRESS FOR EVERYTHING. When planning new improvements or repairs to old ones, just remember—"With CYPRESS you BUILD BUT ONCE"

Let our "ALL-ROUND HELPS DEPARTMENT" help YOU. Our entire resources are at your service with Reliable Counsel.

SOUTHERN CYPRESS MANUFACTURERS' ASSOCIATION
 1210 HIBERNIA BANK BUILDING, NEW ORLEANS, LA.

INSIST ON CYPRESS AT YOUR LOCAL DEALER'S. IF HE HASN'T IT, LET US KNOW IMMEDIATELY

larkspur (*Delphinium formosum*) match their blues with the skies of late June and early July the hardy garden seems worth while for them alone. The seven-foot spires would be more common if more pains were taken to know their requirements. This larkspur will flourish in any garden, but good, rich soil—with no manure next to the roots—and no disturbance for some years is what they want if the best is expected of them. The most wonderful ones I know of, have never been touched since the seedlings were transplanted and they are likely to be ten years old before they will be in actual need of separation. Excepting where seed is desired, the stalks should be cut to the ground after blooming to insure a second crop of blossoms. Then, and also in the spring, some bone meal should be worked into the ground around the plants. Be sure to get good stock; that is half the battle. The type, dark blue with a white center, and Belladonna, turquoise blue, are the two best varieties to start with. If blue is wanted nearer the front of the border, plant the Chinese larkspur (*D. Chinense*), which is lower of growth and comes in a good white also.

There are many phloxes—so many that one could be made to follow the other the season through; but what we all mean when we say this name—*Phlox paniculata*—is nothing short of indispensable. It begins to glorify the garden in July, continues in August, and there is scattering bloom until frost if the plants are not allowed to spend their strength in producing seed. Despite an occasional tendency to blight, no perennial gives more for a minimum of care. If I could have but one variety I would have white, say Mrs. Jenkins—which has very fine panicles of great size. I choose white because it lends an air of coolness to the garden in the dog days and stands out in chaste beauty after nightfall. Of the rose varieties, Le Prophete vies with it in size and the color is of the very best. Then there are the cerise shades. Aetna, Vesuvius and General van Heutsz are all excellent. Another particularly good kind is Antonin Mercie, lilac with a white center. Phlox spreads rapidly, and should be separated every third year or so.

For a summer blue *Veronica longifolia subsessilis* cannot be surpassed. Let this stately, though not very tall, plant come next to white or yellow.

There are several good yellow perennials for summer, but the blanket flower (*Gaillardia grandiflora*) is among the showiest as well as one of the most persistent bloomers. It has various shades of yellow combined with a reddish brown. Support it with light stakes and do not let it go to seed.

No lily is hardier or, on the whole, more satisfactory than the so-called Japanese (*Lilium speciosum*). Plant both the pink and the white, but keep the two kinds apart. They do well in partial shade, and therefore are available where many other perennials are not. Though ordinary gar-

SunDialShop

Antiques
 Interior Decoration



MRS. HERBERT NELSON CURTIS

22 East 34th Street

NEW YORK CITY

TELEPHONE 2970 MADISON

Interior Decoration

Interior decorations of all descriptions planned and executed. Single rooms or whole houses furnished, and wall coverings, hangings, rugs, furniture, etc., selected to suit any scheme. Out of town orders carefully attended to. Lamp and candle shades. Stenciling.

MISS THROOP—MISS VEERHOFF
 37 EAST 60th STREET :: NEW YORK

den soil suits them, they prefer deep sandy loam with a little leaf mould. The soil should be about four inches over the bulb. Usually the bulbs are not to be had until toward the first of November, but it is far better to plant them then than in the spring after they have been stored all winter.

There are two boltonias, the white *B. asteroides* and the pink *B. latisquama*. The white is the better, but both should be planted for bold, tall effects. Before August is over they produce their great flower heads and presage the coming of the wild asters, which they greatly resemble. They spread very rapidly.

As to omissions, the peony, which is best planted in September, does not appear on the list because it was fully treated in the previous issue. Again, the invaluable Canterbury bell, foxglove and hollyhock are left out for the reason that they are biennials—ignorance of which fact causes many an amateur to wonder why they are lost after blooming. All the spring bulbs are fillers in any hardy garden scheme. They may be, and should be, planted in the spaces between the perennials. Finally, there are the fall-blooming perennials, the finest of which are *Anemone Japonica*, *Aconitum autumnalis* and the artemisia or hardy chrysanthemum. These should be planted in spring; a space may easily be left for them in the garden scheme.



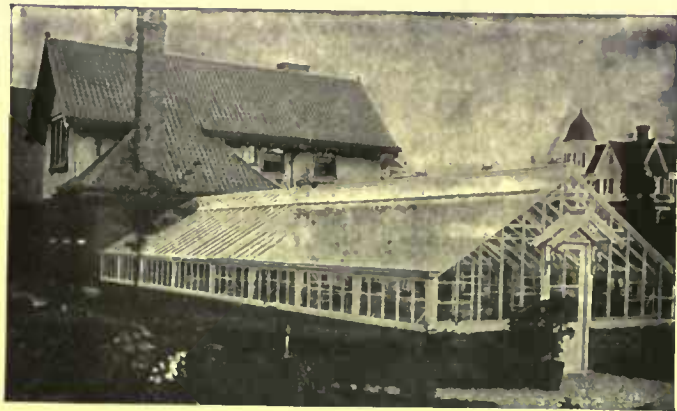
Restoring Old Shrubs to Vigor

(Continued from page 229)

through neglect, a shrub finds its nourishment diminished by the depredations weeds and grasses it promptly reduces its leafiness at the top. As the full number of branches are present just the same, this means that they cannot be so well clothed that many will be bare. And then gradually the whole plant grows weak from hunger. Its root activity reduces as well as its top, for there is nothing for so many roots to do; its vitality gets lower and lower, and by the time someone takes it in hand it has probably only enough feeding roots to supply a bush half its size. It is then truly a weak plant.

Severe pruning reduces the top to a size which the roots can once more take care of; enriching the soil stimulates the growth of more roots, and these in turn furnish so much building material that the top simply has to grow to make use of it. It is built up in spite of itself, fairly pushed out from below, unless the water sprouts which spring from so low on the branches that they are in a position to divert the upflowing life forces, are allowed to grow and to do just this.

Old shrubs which have not sent up these sucker forms of wood, but which have simply stood still—probably because no one has ever come by to pick their blossoms or no wind has ever broken down a branch—can only be thinned rather severely, cut back at their tops moderately and en-



YOUR KIND OF GREENHOUSES

Not those heavy, short lived wooden houses—no not that kind, but fine light enduring Iron Frame Houses that will grow the very best plants possible. Houses you won't have to spend a cent on for repairs, aside from painting, for years to come. Houses built right, ventilated right, and heated

right—houses backed by over a quarter of a century of experience.

If you want your house to have curved eaves, we will gladly build it that way—in fact rather prefer to. Send for our catalog. It is a conclusive bit of evidence.

Hitchings & Company

Spring Street
Elizabeth, N. J.

Be Kind to Your Trees

A few dollars rightly spent to-day insures beauty and comfort for years to come

Appleton & Sewall & Co.

INCORPORATED

Foresters and Surveyors

Old Town, Me. 156 Fifth Avenue New York Bangor, Me.

Practical Methods of Tree Preservation
References:—Yale University, Bowdoin College, Park Dept. City of Bangor, Me., Maine State Forest Commission.

Write for Booklet A

YOUR GARDEN can be improved and beautified by planting those Trees and Shrubs you thought of in the summer.

FALL PLANTING

season is here. Avail yourself of this opportunity to put the finishing touch to your home.

F. W. KELSEY NURSERY CO.
NEW YORK
150 BROADWAY
Everything Worth Planting
We have the stock you want at low cost consistent with quality. Secure our Catalog.
ORDERS COMPLETE
Inquiries for Quotations, etc., incur no obligation
WRITE US NOW

NEW YORK BELTING & PACKING CO. LTD

ORIGINAL MANUFACTURERS

INTERLOCKING RUBBER TILING.

IT IS THE BEST FLOOR MADE
FOR CHURCHES, SCHOOLS, BANKS, PUBLIC BUILDINGS,
THEATRES AND PRIVATE RESIDENCES, BEING SANITARY,
NON-SLIPPERY, SOFT AND COMFORTABLE TO THE TREAD,
BEAUTIFUL IN COLORS AND DESIGNS AND DURABLE.

New York, N. Y., 91-93 Chambers Street
Chicago, Ill., 150 Lake Street
Philadelphia, Pa., 118-120 North 8th Street
San Francisco, Calif., 129-131 First Street
Pittsburg, Pa., 933-935 Liberty Avenue
St. Louis, Mo., 218-220 Chestnut Street
Portland, Ore., 40 First Street
Boston, Mass., 232 Summer Street
Indianapolis, Ind., 207-209 S. Meridian St.
London, England, 18-15 Southampton Row
Spokane, Wash., 183 South Lincoln Street



FLINT'S FINE FURNITURE

MAKING A NEW HOME OUT OF THE OLD

A little money judiciously expended at "Flint's" will accomplish much in the refurnishing of a new home of artistic character from an old one furnished in mediocre taste.

Those whose plans must be governed largely by cost will find in our exhibit of new patterns for Fall, inexpensive designs which afford the broadest opportunity for individual taste in selection and values which must leave undisputed the fact that Flint Prices are uniformly LOW.

Our TRADEMARK and SEVENTY
YEARS' REPUTATION is
your GUARANTEE



GEO. C. FLINT CO.

43-47 WEST 23rd ST.

24-26 WEST 24th ST.

riched very liberally with both the manure and the bone and potash mixture. If this treatment does not restore them to vigor it may be necessary to cut them back entirely and develop a new bush from the sucker growth which the roots will send up. In this case let two or three of the strongest and best grow, cutting away all others.

Division of a shrub at its roots may be the only resort when frequent cutting back has made of those roots a tangled, choked and wide-spreading mass. Shrubbery that has been mowed over by some ruthless wielder of a scythe who has regarded it as "worthless" is an example. It will often send up shoots over an area half a dozen times as broad as even a huge specimen of the variety could possibly cover. To reduce such a growth to a "shrub" is something of a task, and only the actual taking away of a large part of the overgrown root will accomplish it.

The main roots are not taken from the ground, however, but deep digging all around uncovers the portions which are to be amputated, while the main mass remains undisturbed. With the roots uncovered by such excavating, remove those which have formed clumps apart from the main mass and thus reduce the unruly spread below ground. Cut them off sharply with the spade and trim the stumps with a sharp knife so that there are no ragged edges to invite fungous and disease. Mix fertilizer with the earth before restoring it to the hole. The tops will consist entirely of the sprout or sucker growth probably—and a considerable interval must elapse before a real shrub can be evolved. But a season or two of good care, with right pruning, which will throw all the energies of growth into the selected and strongest two or three sprouts, and with just enough heading in to induce lateral branching and prevent lanky growth, will bring surprising results from even this unpromising material.

After a shrub is once reformed and rehabilitated, stop pruning it. Be liberal with fertilizer for three or four seasons and keep the inside branches (those that tend to develop toward the center) pinched out of existence the moment they start little green points along the bark of the old branches. There will be no need for pruning if this is done, and all the strength of the plant will be conserved. When this is the case its age becomes a factor in its favor rather than against it. Every bit of energy should be conserved, however, especially with old plants which have lived under disadvantages for years; they particularly need it.

Keep the ground around each shrub that is being renovated perfectly clean for at least a year. Do not allow even grass to grow up to its base—and till the soil just as it is tilled in a vegetable garden, thus retaining all the moisture for the plant's benefit.

Old shrubs may usually be transplanted with success when they stand in the way of alterations or of new developments in the outside arrangement of an old place.



SO SIMPLE A CHILD CAN OPERATE IT

SHAR PROTARY ASH RECEIVING SYSTEM

Do away with unsightly ash barrels—the inconvenience and drudgery of ash disposal. No piling of ashes on the cellar floor—no furnace dust in your living rooms. Ashes and waste matter held in removable, strong, iron cans that revolve in cement-lined vault. Save cost and nuisance of an outside garbage disposal, especially in winter. Perfectly sanitary. No chance for flies or vermin. Odors and gases go through fire and are burned or escape up the chimney.

EASY TO MOVE 6 TO 10 WEEKS ASHES IN PORTABLE CANS

The Sharp Rotary Ash Receiving System can be installed in any building, old or new, under any style of House-Heating Furnace or Boiler, before or after it is in operation. Ashes fall directly into strong iron cans that revolve easily as filled.

Endorsed by Health Officers, Architects and Heating Contractors. Worth while to investigate before you complete your building plans.

Write Today for illustrated catalog of practical demonstrations and testimonials. Dealers' and Architects' names appreciated.

W. M. SHARP COMPANY
217 Park Ave.

Binghamton, N. Y.



Holds 6 to 10 weeks' ashes, removal of which is no effort.

Possess a Perfect Lawn

Old England's historic estates are carpeted with the most beautiful stretches of Lawn. Through centuries of careful study and trial, coarse undesirable grasses have been supplanted by a uniform durable species, almost the texture of velvet.

Let English Lawns Surround Your Own Home

Barwell's Imported English Lawn Grass Seed Mixture comes across the Atlantic in large quantities every season. It is literally the finest, straight from its "Native Heath." It is thoroughly hardy and grows luxuriantly in sun or shade.

Directions and information for seeding and making a perfect Lawn, free on application. Just mail us the measurement of your lawn space describing its soil and situation.

Barwell's Agricultural Works

WAUKEGAN, ILLINOIS

Established at Leicester, England, in 1800

as a new tenant so often finds that they do. But the work of removing them is done deliberately and each step followed successively without skips. The moving may be done either in the spring before growth starts, or in the autumn after the leaves have fallen.

Begin digging on the line of a circle as large as the top of the bush to be moved, drawn from the bush itself as centre. Work in towards the shrub with a pick or a crowbar preferably, loosening the earth all around and digging it up and throwing it out as fast as it is loosened. If a shovel has to be used, hold it with its flat side on a line parallel with the radii of the circle rather than towards the bush. This prevents its cutting off the ends of roots, for these radiate from the plant of course, and the shovel blade strikes between them instead of across them.

When the roots are exposed work on down through them and around under them, tilting the bush gently back and forth to help in loosening them from the soil. Do not drag it out forcibly under any circumstances, but take time and do the work with as little loss of small rootlets as possible. These are really the most valuable.

The earth will yield more readily the day or two after a shower, but do not undertake transplanting anything immediately after a rain. When the ground is wet it is likely to cake into mud pockets around roots and leave them "hung" as it dies out.

If a receptacle large enough to take in the roots is available have it at hand, half full of a "puddle"—a mixture of earth and water the consistency of cream—into which to plunge them as soon as they are out of the ground, and carry the shrub to its new quarters in this receptacle. A very large shrub can hardly be handled in this way, however, so other precautions to shade and protect its roots until they are once more in the ground must be taken, to prevent them from drying out.

Dig a hole to receive it as large and as deep as the hole it came out of and of the same form, allowing for all root eccentricities and irregularities. Cut back the top as already directed in the reference to pruning, and cut off all bruised and broken roots. Set it into this hole, placing all the main roots in the same position they occupied—the position they will naturally take if not twisted or cramped—and throw the earth over and around the roots, by single shovelfuls. Work it under and through them by tamping it with a round-ended stick, taking time. Hurry is fatal, for hurry means lack of thoroughness.

When the hole is half filled, pour in water slowly, all around, to settle the earth. When this has leached down and is completely out of sight, go on filling until the saucer depression stage is reached. Pack the earth by tramping, then fill the "saucer" with water and leave for awhile. At the end of a few hours throw a half inch of loose earth over the ground all around, for a dust mulch, to conserve the water.



St. Regis Everbearing

The Raspberry for the Million and the Millionaire. "There's Millions In It."

You can now have wonderful raspberries from June to October by setting out the plants in the fall.

St. Regis produces continuously from June to October—heavy crops of large, luscious, sugary berries of bright crimson.

Big profits growing St. Regis for market.

Grows successfully in any soil—endures without injury heat, drought and severest cold. Catalogue free.

Grow
Chestnuts
Like This
For Profit



Covers a 50c. piece.

The trees are hardy, rapid, symmetrical growth; luxuriant foliage; spreading boughs; clean trunk; stately lines.

These qualities combined and developed by science to a degree that closely borders perfection, in the new

SOBER PARAGON

Mammoh Sweet Chestnut

Crop, Fall of 1910, brought \$18,000, orchard only 8 years old.

The only large sweet chestnut in the world.

Bears the second year. The nuts average 1 to 2 inches in diameter.

United States Pomologist, G. B. Brackett, says "It is of large size, fine appearance and excellent flavor."

Testimony from growers, commission merchants, Forestry Experts, etc., given in our free booklet.

We own exclusive control of Sober Paragon. This copyrighted meta seal is attached to every genuine tree.



Basket of Mantura Pecans.

Hardy Acclimated Pecan Trees for Planting in Northern States

Here are Pecan Trees which will thrive in Northern States—producing as prolifically and as profitably as any Southern Pecans.

Pecan Orchards pay far bigger profits per acre than wheat or corn.

A shade-tree of wondrous beauty, long the pride of the South, may now adorn any Northern landscape.

We have five varieties of hardy trees best suited for Northern planting. These have withstood temperatures far below zero—never been known to "winter kill." Successful in almost any soil. Reach maturity in 5 to 7 years.

Catalogue free.

GLEN BROTHERS, Glenwood Nursery (Est'd 1886), 1808 Main St., Rochester, N. Y.

400 HARDY bulbs for October planting for \$5.00, 1/2, or 200 bulbs, for \$2.75, 1/4, or 100, for \$1.50.

12 FINE Bedding Hyacinths, your choice of colors.

12 Grape Hyacinths, 6 white, 6 blue.

20 Single Tulips, your choice of colors.

10 Double Tulips, your choice of colors.

12 Mixed Darwin (May flowering Tulips).

12 Trumpet Narcissus.

12 Poetlens Narcissus.

12 Double white Narcissus.

12 Jonquil Rugelous.

100 Crocuses, your choice of colors.

10 English Iris.

50 Ranunculus, mixed.

50 Spanish Iris, your choice of colors.

26 Scilla Sibirica.

50 Single Giant Snowdrops.

PRICES include DELIVERY paid.

Send for our Fall Catalogue.

H. H. BERGER & CO.,
Dept. H, 70 Warren St., New York

GARDEN TERRA COTTA



STRENGTH and durability characterize the Galloway productions.

Send for Catalogue of Garden Furniture, showing vases, flower pots, sun-dials, benches, etc.

GALLOWAY TERRA COTTA CO.
3218 WALNUT ST. PHILADELPHIA.

IN HOMES WHERE QUALITY COUNTS
you will find the

BRUNSWICK

HOUSEHOLD
REFRIGERATING
and ICE MAKING PLANTS

PERFECT REFRIGERATION
INDEPENDENCE OF THE ICE MAN

Each plant is designed to meet the requirements of the individual home, and guaranteed to do the work that it is designed for.

Our strongest argument is the testimony of BRUNSWICK users.

Write for list of installations, and if you are not convinced on the spot, you will at least be interested and the game half won.

A postal will bring full information.

INVESTIGATE.

RISK A PENNY.

The Brunswick Refrigerating Co.
New Brunswick, N. J. Branch Offices or Agencies in Principal Cities





Harmony and Durability in Paint

It is a fortunate thing in house painting that beauty and wear may go hand in hand. The color scheme should be one that will make the home an attractive and harmonious part of the neighborhood picture. That gives you beauty.

The wear that is the duration of the beauty depends on the materials and the way they are applied. When you buy or specify

"Dutch Boy Painter" Pure White Lead

and pure linseed oil, you have gone as far as any one can go in the choice of right materials. They are standard and reliable. A good painter does the rest.

The cost of this best sort of painting is not excessive, for two simple reasons: White lead paint covers better than substitutes and wears longer.

Painting Helps,

one of our booklets, gives you practical aid in deciding what combination of colors will best suit your style of house. Other booklets and specifications will show you the advantages of "Dutch Boy Painter" white-lead. Ask for Painting Helps No. 791.



NATIONAL LEAD COMPANY

New York Boston Buffalo Cincinnati Cleveland
St. Louis Chicago San Francisco
(John T. Lewis & Bros. Co., Philadelphia)
(National Lead & Oil Co., Pittsburgh)

Flowers need not be expected after spring pruning on snowballs, lilacs, syringas, "bridal wreath," honeysuckle, privet, nor indeed any spring or early-flowering shrub. Rose of Sharon will blossom after spring pruning because it is a late flowering shrub and the cutting away of branches in the spring does not take its flower buds, these not being formed until the summer during which they are produced. Spring-flowering shrubs, on the other hand, form their flower buds during the growth of the previous summer and hold them over the winter, or if they do not actually hold them over, the old wood of last year is the source of their rise when spring comes. For this reason there will be no blossoms immediately following the spring pruning of spring-flowering shrubs or the summer pruning of late flowering shrubs. A season will be required to start them going. This is really just as well, however, for blossoming is only an effort at reproduction, and shrubs that are in need of renovating are not strong enough to busy themselves with this right away because of the long neglect to which they have been subjected.



Annuals That Do Better When Fall Sown

(Continued from page 224)

harmonious in tone, therefore any mixture will be effective; or a selection to suit individual color preference may of course be made. Whatever the selection, plan to have the flowers in a large mass. The plants grow about one foot high and with them, as with all flowers, if not allowed to form seed, they blossom the more persistently. The seeds are very small and require only to be thinly broadcast upon finely pulverized earth, which should then be lightly raked. Sow late in the fall.

Pansies we all know will almost "grow themselves" if allowed half a chance to do so. But the finest blossoms, the true giants, are the reward of care and some definite planning and attention. They do not like heat, and the plants should be located in partial shade, in deference to this aversion. Seeds may be sown in the fall—October is the best time, except in very severe climates—in a good rich seedbed in the open, or in a coldframe. If they are started in the open it is well to transplant the little plants to the coldframe before very cold weather. They may be protected, however, if the bed is raised so that water will not settle on it, by covering them with dry leaves and holding these down with brush. Usually they will winter perfectly under such a blanket and start up early in the spring.

Sown at almost any season pansies will bloom, and bloom well, but the finest flowers are usually produced from the fall seedlings. I have raised beauties, however, from spring sowing, outdoors, and under conditions in no way unusual, unless



McCutcheon's Linen Catalogue

Free on Request

WE have been specialists in Housekeeping Linens. Handkerchiefs and Linen goods of all kinds for more than half a century.

Our assortments are so comprehensive that the phrase—"Anything worth having in Linen can be had at McCutcheon's," has become proverbial.

We believe in the old-fashioned standards of integrity and trustworthiness combined with thoroughly up-to-date merchandise.

Our new catalogue—just published—is a convenient handbook of what "The Linen Store" has to offer.

It illustrates a large variety of the newest designs and styles in the various lines of goods which we carry. Write for a copy of Catalogue No. 24 to

James McCutcheon & Co.
34th St. & 5th Ave., New York

SAVE YOUR TREES

They are too precious to lose. Get expert surgeons to examine them and advise you as to what they need. Avoid tree fakers and tree butchers. Our free booklets explain tree surgery, the science founded by John Davey. Write for them.

The Davey Tree Expert Co., Inc., 4510 Acorn St., Kent, Ohio

Landscape Gardening



Prof. Craig

A course for Homemakers and Gardeners taught by Prof. Craig and Prof. Batchelor, of Cornell University.

Gardeners who understand up-to-date methods and practice are in demand for the best positions.

A knowledge of Landscape Gardening is indispensable to those who would have the pleasantest homes.

250 page Catalog free. Write to-day.

THE HOME CORRESPONDENCE SCHOOL
Dept. 226, Springfield, Mass.

BETTER LAWNS AND GARDENS WIZARD BRAND Pulverized Sheep Manure

Wonderful results quickly. No weeds or foreign grasses. Economical and convenient to use. Unequaled for lawn, flowers, trees, shrubs, fruit, meadows and grain fields. per bbl. freight prepaid east of Missouri River. Cash with order. Ask for quantity prices. Write for copy of booklet "Lawn and Garden." Gives valuable pointers.

THE PULVERIZED MANURE COMPANY
28 Union Stock Yards Chicago

Wizard Brand is handled by first class seed men



perhaps exceptionally favorable weather in that the summer was cool. But I have never done it more than once. The fierce heat of summer usually retards the development of the flowers so that they are tiny, if they come at all, and it affects the vigor of the plant generally to a considerable degree.

Give them plenty of moisture except during actual winter weather, and bear in mind that the finest strains of seed produce plants which bear the finest flowers.

No flower can approach the gorgeous splendor and wonderful airiness combined, which are the attributes of the barbaric poppy. The color range may almost literally be said to be from white to black. These are scarlets that blaze like fire; lavender and pinks are touched on the way; only the blue is omitted.

Plant poppy seeds where the plants are to grow; they have a long tap root and transplanting nearly always kills them. See to it that they have a background of green against which to flaunt their brilliance, and put them in sandy loam, in full sunlight. Their small seeds should be thinly sown broadcast, and the ground raked lightly over them, just as with the eschscholzia. Mulch them with leaves if growth is made before winter sets in: late sowing will not give them time for this, however.

The difference which fall sowing makes with sweet peas is remarkable and almost unbelievable. Instead of growing scraggy and ugly at the bottom the vines stay green and thrifty, and the blossoms are much earlier, as well as more abundant. Locate them where the soil is a clay loam if possible—and do not raise them year after year in the same place. Dig the earth out from a trench one and a half to two feet deep and a foot wide, and mix bone meal with it. Put back enough to fill the trench to within eight inches of the top. Sow the seeds in two rows on this, then fill on up to the top and firm the earth down. By June it is well to draw the top soil up about the vines an inch or so, but only the top soil ought ever to be disturbed. The usual withered and half dead condition at the base of the vines is due to the burning of the network of roots below the hot earth, when the sun is literally "scorching." Deep planting, by insuring great depth of root, avoids this, and it of course insures uniformity of moisture.

Give the vines a trellis between the rows or set up brush as soon as the plants appear in the spring, for they should have an opportunity to climb as soon as the first runner shows. Otherwise they grow branchy and ugly, distorting themselves in the effort to find something to cling to.

The well-known pheasant's eye which blossoms in June and the *Flos Adonis*, which blossoms during midsummer, are members of the same family and have the same tastes. A fairly good soil which is light rather than heavy, and rather moist, suits them; and they will do well in part shade or full sun. The seeds germinate

HAVE MUNSON-WHITAKER CO INSPECT YOUR ORCHARDS

WHAT'S the use of having them inspected, you ask? Well, just for instance—are your apples this year fine, good-size specimens, free from worm holes; or were they smaller than they used to be and did more than half of them drop off?

Our inspection would reveal the trouble. Are some of your trees unhealthy and others dying in spots? Our inspection would locate the trouble. Every once in a while when a strong wind comes along are some of the big limbs broken down, showing up big decay spots you never imagined were there? Our inspection would have discovered them and those limbs could have been saved.

Have your trees grown so tall its the hardest kind of hard work to pick the apples? Our inspection would point out how the

trees could be headed back giving better fruit, more of it and easy to pick.

Most automobile owners think they know pretty much all about their machine, still once a year at least they take it to a garage and an expert man goes all over it. That's exactly what our inspectors are—expert—orchard men. If you want expert advice and expert handling of your trees then you want us. Send for one of our inspectors. If not quite ready for that, then send for our booklet—"Trees—The Care They Should Have." There is one chapter in it devoted entirely to "Making The Orchard Pay." Tells how one in particular now pays.



Glimpse in an orchard after heading back the trees.



Munson-Whitaker Company
FORESTERS

Boston—623 Tremont Bldg. New York—823 Fourth Ave. Bldg.
Pittsburg—743 Oliver Bldg.



**WHEN IN BOSTON STAY AT THE
COPLEY SQUARE HOTEL**

HUNTINGTON AVE., EXETER AND BLADGEN STS.

A high-class, modern house, intelligent service, moderate prices, pleasant rooms, superior cuisine. Long distance telephone in every room.

Ladies traveling alone are assured of courteous attention.

AMOS H. WHIPPLE, PROPRIETOR.

P E O N I E S

Two hundred thousand roots in three hundred of the finest varieties guaranteed true to name.

We offer one and two year old stock; also extra large four year clumps for fall planting.

SEND FOR CATALOGUE AND ORDER EARLY

COTTAGE GARDENS CO., Inc.

QUEENS

NURSERIES

NEW YORK



PLYMOUTH FURS

Trade Mark.

The standard high grade furs of America, individually designed, made from superior grade of pelts by the best fur workmen.

Style Book R is illustrated by the best fashion artists of the country—contains furs for Men, Women and Children at prices varying from \$5 to \$5,000. It will be sent free if you let us know what furs interest you.

Repairs and Renovations at Reasonable Prices

PLYMOUTH FUR CO.

125 to 165 Plymouth Bldg.
MINNEAPOLIS, MINN.

slowly, which is the reason for sowing in the fall. They require no special treatment, but the slight covering before referred to is advisable for all autumn sown seeds. Plants of adonis grow about a foot high; the blossoms are red.

Catch-fly (*Silene*) should have its seeds sown rather early in the fall. In a sandy loam where there is full sunlight. The variety *pendula* is really a prostrate growing plant and, used in abundance, makes a good ground cover. Its flowers are rosy pink. *Silene Armeria* is erect, growing a foot to a foot and a half high; this has white or rose-colored blossoms.

Fall sowing for these annuals which will bear it, is a distinct gain for the garden in that it advances their flowering so greatly, hence there is a double reason for this forehandedness. Annuals ordinarily come into bloom comparatively late because they must make all their growth of root as well as top after summer has actually come. Fall planting gives them the advantage of a much earlier start, as well as providing conditions which are generally more favorable to the particular requirements of the plants for which it is recommended.



What Can Be Done in Finishing Inexpensive Woods

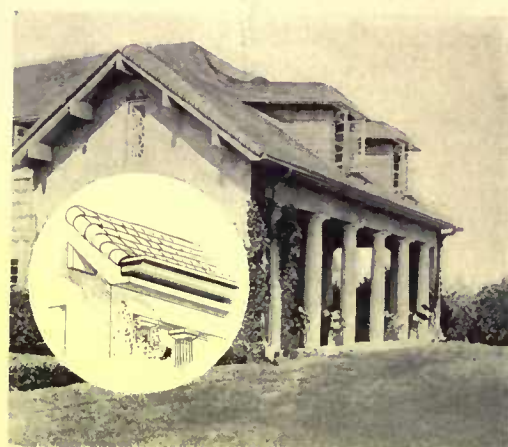
(Continued from page 239)

ishments. Treasures discovered in these places are sometimes kept for years by prospective house owners who finally build them into their homes.

Stains and finishes may be bought ready mixed at a paint shop, from factories where Mission furniture is made, or from wood finishing companies. They may also be prepared at home from chemicals, dyes, or pigments soluble in oil or water. Different woods take stains very differently; the amount of tannin or of rosin that they contain, and their softness or hardness, being factors that enter into the difference. It is thus advisable to try stain upon wood samples before using it upon woodwork.

An easy method to follow is to buy at a paint shop, colors ground in japan, thinning them with turpentine. Coach colors are recommended. The colors most used mixed with turpentine for oil stains are burnt sienna, Prussian blue, Van Dyke brown, medium chrome, drop black, vermilion or madder. Black is found valuable in mixing greens, and a good green is made with two parts drop black and one part chrome yellow, toned with a little vermilion. Wood browns and a forest green may be procured ready mixed. A satisfactory brown is made from asphaltum varnish thinned with turpentine.

Before applying the stain the wood should first be sanded with 00 sandpaper. The stain is put on with cheesecloth and



See what an admirable finish it gives to the eaves of this house with its shingle thatch effect.

The Solution of Your Gutter Troubles

IF you are a house owner, you know the constant annoyance and expense your gutters are. If you are not, make sure when you do build that you use Hitchings' Indestructible Cast Iron Gutters.

The regular sheet metal gutters rust out before you know it, and the first intimation you have is the streaks of rust stain on your house. Even the costly copper gutters are short-lived in some vicinities.

In England cast iron gutters are in use everywhere, and have been for over a century. They stand that destructive climate for generations.

Just so you can see the actual gutters themselves and know their shape, thickness, and so on, we will send you, at our expense, a section of each of the two styles. Along with it will be a circular explaining and illustrating the gutters fully. Write us.



The moulded face gutter is made in 6 feet lengths, 5 inches wide and 3 deep.

HITCHINGS & COMPANY
Spring Street Elizabeth, N. J.

INTERIOR DECORATORS

Color Schemes Planned and Executed
Stencil Work and Applique Work : :
Samples and Estimates on Request

BOWDOIN & MANLEY

546 Fifth Avenue

New York

rubbed off quickly. A coat of shellac, sanded a trifle, and later a coat of wax rubbed till a soft dull finish is gained, complete the treatment. It is possible, however, to get a good finish with merely a coat of wax over the stain. For a very fine finish several coats of shellac rubbed down with sandpaper are customary. Beeswax, melted, and mixed after removal from the fire with a little turpentine, may be used, or in its stead, one of the preparations of floor wax on the market. Oil stains have the advantage of not raising the grain of the wood, though they are not always permanent and may give a muddy look. Water stains require more skill to handle, and raise the grain, which then has to be sanded again, and touched up with stain, but they are permanent, cheap, and give clear results. If the wood is first gone over with a sponge moistened in water the raising of the grain may be avoided. Aniline dyes are sometimes used in turpentine and wax solution or in water.

Bichromate of potash produces on oak a warm brown, on ash a rich red and on black walnut a dark brown. Another way of getting a brown color upon oak is by adding to one quart of water two ounces each of potash and pearlash. This, brushed on the wood, must be used carefully. Birch, frequently dyed in doubtful taste to imitate mahogany, has its natural color deepened by a diluted sulphuric acid application. Care must of course be used in handling the acid. Its action may be stopped by the use of ammonia. Sulphuric acid brushed on, gives gray tones to pine and to cypress. One part of acid to five of water being used. Gumwood is given a gray color by an iron rust stain made by leaving iron filings in vinegar for some forty-eight hours. This stain may be weakened by water as desired. As in the case of many other stains, its effects do not show until the wood is perfectly dry. A satisfactory light gray is difficult to get upon oak with oil colors, which give an opaque look to the grain, but from Germany, where the subject of stains and finishes has been entered into with characteristic thoroughness, comes an interesting receipt. The oak is brushed with a solution obtained by putting twenty grammes of sulphate of iron into one litre of water. In a short time a bluish gray tint appears as the result of the action of blue vitriol upon the tannin in the oak.

The method followed to obtain warm browns, greens and other dark colors upon oak and chestnut includes a preliminary treatment with ammonia fumes, which penetrate the wood to a considerable depth, preventing the light marks that come with hard treatment on poorly finished oak. Stain, a coat of shellac rubbed down with sandpaper and wax, are afterwards applied. To fume woodwork, after it is set up and sanded, a strong solution of ammonia, twenty-six per cent., is placed on the floor in open dishes. About a gallon might be used for a large room. The room is sealed, as for fumigating, as closely as possible, with strips of paper pasted

B. Altman & Co.

INVITE INSPECTION OF THEIR NEW STOCKS OF
ORIENTAL CARPETS, RUGS & HALL RUNNERS

ANTIQUES AND SEMI-ANTIQUES

ALSO FINE SPECIMENS OF MODERN ORIENTAL
RUGS ESPECIALLY SELECTED WITH A VIEW
TO HOME DECORATIVE REQUIREMENTS

MODERATE PRICES PREVAIL

Fifth Avenue

THIRTY-FOURTH STREET
THIRTY-FIFTH STREET

New York



Opens with the Foot.

THE STEPHENSON
PATENT

SECOND: This clean, convenient way of disposing of ashes from furnace or hot water heater, cellar and yard refuse. Fire proof, flush with floor. Abolish the old ash barrel.



A Camp Necessity.

THREE THINGS YOU NEED

FIRST: The only sanitary method of caring for garbage, deep in the ground in heavy galvanized bucket with ball. Garbage cannot freeze. Avoid the battered can and scattered refuse resulting from removal of frozen contents. Health Demands It.

UNDERGROUND GARBAGE RECEIVER
UNDERFLOOR REFUSE RECEIVER
UNDERGROUND EARTH CLOSET



Easy to sweep into.

THIRD: It supplies a safe and sanitary method to keep your water supply safe from pollution. It prevents the danger from the house or typhoid fly, around camp or farm, disseminating its poisonous germs to your family. Nine years in practical use. It pays to look us up.

Sold direct. Send for Circulars on each.
G. H. STEPHENSON, Mfr.
20 Farrar Street
Lynn, Mass.



THE
PERGOLA

HARTMANN-SANDERS COMPANY

Send for catalogue No. P-27 of Pergolas, sun dials and garden furniture, or P-40 of wood columns.

HARTMANN-SANDERS CO.

Elston & Webster Avenues, Chicago, Ill.
East office, 1123 Broadway, New York City

Exclusive Manufacturers of

KOLL'S PATENT LOCK JOINT COLUMNS

Suitable for Pergolas, porches and interior use.



NO DELAY TO GET THE CLOTHES DRY ON WASH DAY

When using the "CHICAGO-FRANCIS" Combined Clothes Dryer and Laundry Stove. Clothes are dried without extra expense, as the waste heat from the laundry stove dries the clothes. Can furnish stove suitable for burning wood, coal or gas. Dries the clothes as perfectly as sunshine. Especially adapted for use in Residences, Apartment Buildings and Institutions. All Dryers are built to order in various sizes and can be made to fit almost any laundry room. Write today for descriptive circular and our handsomely illustrated No. 12 catalog. Address nearest office.

CHICAGO DRYER CO. OR SHANNON MFG. CO.

630 So. Wabash Ave., CHICAGO, ILL.

124 Lexington Ave., NEW YORK CITY

Plant for Immediate Effect Not for Future Generations

Start with the largest stock that can be secured. It takes over twenty years to grow such Trees and Shrubs as we offer.

We do the long waiting---thus enabling you to secure Trees and Shrubs that give an immediate effect. Price List Now Ready.

ANDORRA NURSERIES Box CHESTNUT HILL,
H. PHILADELPHIA, PA.
WM. WARNER HARPER, Proprietor

HARPER'S BAZAR

FOR
OCTOBER

FALL FASHION NUMBER

HERE is the first glimpse of the styles which were decided upon by the great Parisian modistes and milliners at their annual congress in August. The most exclusive French modes, and the equally interesting American styles, are described and illustrated by the Bazar's special contributors and artists. Here are fashions for all tastes and purses: fashions for college girls, for business women, and elderly women, dainty negligees and mourning frocks, gowns, hats, tailor suits, special bodices and practical coats.

OTHER FEATURES

PAPER-BAG COOKERY—Margaret Soundstrom

supplies much practical information in regard to this important new branch of domestic science.

PRESERVES and PICKLES—Virginia Terhune Van de Water

is of timely interest and value to the housekeeper whose pride is in a well-stocked storeroom.

MAKING DOLLS' FURNITURE—Josephine W. How

gives suggestions for the manufacture of unique Christmas gifts.

MISS CHURCHILL'S TWINS—Elizabeth Jordan

"hits off" some up-to-date theories in child-training. The tale is illustrated with the chubby, sunny babes Grace G. Drayton draws so charmingly.

THE CHILDREN'S PAGES

This popular double-page feature has been increased to twice the original size.

All News-stands—15 Cents

around doors and windows, and is left for twenty-four or even forty-eight hours. The longer it is left the darker the color obtained. Care must be taken in opening the room to avoid being overcome by the ammonia fumes. Another method sometimes followed, but not so effectual since it raises the grain of the wood and does not penetrate it so far, is to brush on a strong solution of ammonia. It is not a pleasant task for the workman, and doors and windows must be left open. Where woodwork will not receive hard usage, it is sometimes possible to get a good color without the ammonia by the use of stains alone.

Filling in the pores of a wood to give it a hard metallic quality is to be avoided. A woody texture with a soft, not glassy, surface, showing the quality through the grain, is desirable. In some woods, such as mahogany, cherry, cypress and gum-wood, good effects are gained by merely rubbing the wood with raw linseed oil, giving it a soft dull finish in a natural color that deepens with age. A pad of soft cloth is used, and the wood rubbed with a circular movement, as much oil being rubbed in as possible. This method, antedating French polishing, can be carried on till the wood assumes a high polish, but this is not necessary. If a natural color is desired on oak, wax is better than oil as a finish, but the molasses candy color of unstained oak is deservedly unpopular at present.

An interesting effect in a small house interior finished in cypress is shown in our photograph. The cypress was stained a warm brown tone, finished by a coat of wax without shellac. Small house interiors finished throughout in cypress or pine are not uncommon, with different stains used to give variety.

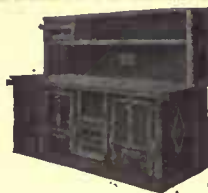


The Fall Clean-up in the Flower and Vegetable Garden

(Continued from page 235)

ceptional beauties which one hates to see lost forever in the autumnal slaughter. With a little skill in the use of the cutting-box, new plants can be had easily. And what is more, they must be exactly true to the plants from which they are taken, while if seed had been depended upon they would likely have produced everything but what was most wanted. October usually furnishes the ideal conditions for making and rooting cuttings of geraniums and most of the other garden flowers that can be increased by this method—the method of taking the cuttings, the proper condition of the wood, the preparation of the cutting-box, are all described in detail in this month's Department (page 244).

Thirdly, there is the possibility of keeping some of the favorites of the garden for winter service in the window garden. While cuttings may be depended upon to



One of our many models now in stock.

Call or Write for Our Catalog and Full Information on Kitchen Equipment.

A Combination Range for Every Purpose

Good for winter cooking with heating; good for summer cooking without heating—the

Deane Combination Coal and Gas Range

Two ranges in one. Has ovens, gridiron broilers, toasters and all other up-to-date features. Gas and coal can be used at the same time when preparing a big meal; or separately as desired. Don't buy any range before calling upon us.

Bramhall-Deane Company,
261 W. 36th St., New York City
Cooking Apparatus of All Kinds

The gum with the real, rich, lasting mint flavor.

If not at your dealer's send 5c for pkg.



We are also Manufacturers of

V-ALL-NO
AFTER DINNER MINT

MANUFACTURING CO. OF AMERICA
463 N. 12TH STREET
PHILADELPHIA, U. S. A.

Send 10c for liberal box.

maintain the stock for outdoor use next summer, most of the plants so started will not make very big specimens before next April or May, and it will therefore be desirable to save some of the large plants. If taken up and potted at the last moment, and brought directly into the house, not one in fifty would live; but if the plants are severely cut back, the roots carefully trimmed and proper treatment—which is described more in detail in the Garden Department—given, most of them will come through all right and repay very handsomely the trouble taken.

And lastly, there are the plants to buy for the house. Don't wait until Christmas, when the best of the florists' stock has been picked out and prices are abnormally high. There is no better time to get plants than now, and furthermore they will receive less of a shock in being removed from the greenhouse to your living-rooms, a matter of great importance.

First of all in consideration for this purpose, perhaps, come the ferns. There is not space here to go over the list, but I want to put in one word of advice: do not be content to take whatever a small local florist may have on hand, because there are a number of comparatively recent introductions which will please you better. Scotti is an improved form of the famous Boston fern. Whitmani is one of the most beautiful of the ostrich plume ferns, and well suited to house culture. Scholzei is a plumed form of the Scotti fern. *Pteris Childsi* and *Victoriæ* are beautiful new forms of the popular *Pteris*; and a great improvement on the universally favorite holly fern is *Cyrtomium Rochfordianum*, the crested holly. All of these are well suited to withstand the somewhat uncertain conditions of house culture.

Then there is the beautiful Lorraine begonia, and azaleas, primulas, cyclamen, araucarias, among the winter plants one gets of the florist. If your local florist hasn't them, do not be afraid to order from one of the large catalogue firms. If you attend to it now there will be no danger of injury by frost.

Bulbs (and tuberous rooted plants such as the gladiolus, usually termed bulbs) include two general classes: those planted in fall and those planted in spring. Attention must be given both in the fall clean-up.

The fall-planted bulbs include two groups—the Holland bulbs, such as crocus, hyacinth, tulip, narcissus, etc., which bloom very early in the spring, and the various summer blooming lillies, such as *Lilium auratum* (the Japanese gold-banded lily) and its beautiful varieties. Both require practically the same treatment; soil well enriched with old rotted manure, and leaf-mould and sand added if the soil is at all heavy, and winter mulching. Varieties and details of planting are described in another article.

The spring planted bulbs—arums, amaryllis, cannas, callas, dahlias, gladioli, tuberose, etc.—are not hardy, and must

HOME HEATING and VENTILATING

Send for Our New Booklet

"Achievements in House Heating"

so that you may know what GOOD HEALTHFUL HEATING REALLY IS, and what has been accomplished in heating and VENTILATING fine residences by

Kelsey ^{WARM} AIR Generators

**WE CAN
PROVE
TO YOU**

that the KELSEY with the ZIG-ZAG HEAT TUBES is most powerful and ECONOMICAL because it has much greater weight and heating surfaces than other heaters and warms air by the best method; that it warms

enough FRESH AIR to supply a complete change of air to every room 3 to 5 times per hour; that it heats distant or exposed rooms, maintains an even temperature and is most easily managed and regulated.

DON'T MAKE THE MISTAKE of installing any System WITH RADIATORS IN THE ROOMS which heat and reheat the same foul air and cause throat and lung diseases.

40,000 HOME OWNERS

have installed Kelsey Heating because they wanted clean, healthful FRESH AIR HEATING and a low cost for fuel, management and repairs.



KELSEY HEATING

Is for homes of any size from 5 to 75 rooms and for churches and school buildings.

Let us give you names of prominent users.

KELSEY HEATING CO.

Main Office: 66 E. Fayette St., Syracuse, N. Y.
New York Office: 154 C Fifth Ave.

HARDY, OLD FASHIONED GARDEN FLOWERS

Now is the time to plan: Paeonies, Phlox, Iris, Oriental Poppies, etc. Send for my Catalogue and special list of choice perennial plants and everblooming Hybrid Tea Roses, etc. Waterlilies and hardy plants a specialty.

WM. TRICKER, Arlington, N. J.



MANTELS

FRANCIS HOWARD
15 E. 34th St., N. Y. C.

Benches, Pedestals,
Fonts, Vases, Busts,
GARDEN EXPERT

Send 15c. for Booklet

ENTRANCES

CALIFORNIA PRIVET

Best of the Hedge Plants—an ideal hedge for lawn purposes. A quick grower. No thorns. Easily trained. California Privet is generally known and universally popular. Particularly suitable for private grounds. Perfectly hardy and almost evergreen. Large stock. Prompt shipments. Plant this Fall and gain a season. Write to-day for free Catalogue of Trees, Vines, etc.

ARTHUR J. COLLINS

Box Y, MOORESTOWN, N. J.

12 Best Shrubs, \$3.50

One of each or assorted (by express), 6 for \$2.00; 24 for \$6.50. Hardy, fibrous-rooted bushes that give succession of bloom. Golden Bell, Japan Quince, Persian Lilac, Weigela, Syringa, Bush Honey-suckle, Dazila, Bridal Wreath, Japanese Brier, Hydrangea, Althea and Japanese Barberry. Plant this Fall. Write for Beautiful, illustrated Catalog with helpful cultural hints.

FRED HAXTON 4719 Winthrop Ave., Chicago
Owner of Ottawa Gardens



MOON'S TREES AND SHRUBS

WRITE to MOON'S—a nursery where quality is paramount—for a catalogue of "HARDY TREES and PLANTS for EVERY PLACE and PURPOSE" that will give pleasure from the increased beauty and permanent accumulative value that they will add to your property.

THE WILLIAM H. MOON COMPANY

PHILADELPHIA OFFICE,
21 SOUTH 12th STREET

"Makefield Place," Morrisville, Pa.

NOW, ABOUT THOSE APPLES—

Dame Nature was in a kindly mood when she fashioned this farm. She tipped the best land to the east that it might catch the earliest sunshine, fed it with springs and protected it from the cold winds by placing it in an amphitheatre of encircling hills.

We think that the apples grown in this orchard have a little the best flavor of any on earth.

They are good because Dame Nature was thinking of apples when she fashioned this farm.

They are good because the rigors of the winters make hardy, full-flavored fruit, and the bright sunshine of the summer lays on the color so the apples are fair to see.

Here's what we can give you right now:

FAMEUSE.—Of the varieties which we grow we prefer the Fameuse (Snow), for we think it grows to perfection with us. Normally this is considered an early fall apple, but here it often keeps until spring. You know it; an early red and white, fine-flavored, crisp eating apple. Small, but full of spice.

McINTOSH RED.—This is another of the Fameuse group and perhaps the most popular. Dark red and of fine flavor for dessert.

BETHEL.—Our best winter apple is the Bethel. This variety originated within thirty miles of this farm. It matures late in the fall, is a dark red color and one of the best of keepers, and as handsome a winter apple as one cares to see. It resembles a Northern Spy, and makes a splendid eating apple.

NODHEAD.—The Nodhead is another of our favorites. A late apple, it is streaked with red and makes a table fruit of quality. It is a good keeper and should please you.

We shall pack the fancy grades of these apples under our trademark of "Topsham Quality," in Western style as near as may be, and will deliver them, freight prepaid, to either Boston or New York for \$2.50 per box. We will appreciate a trial order and ask for a check with the order. Our personal guarantee goes with every box of "Topsham Quality." We wish to replace every apple that arrives in damaged condition, through fault of ours, whenever this is possible.

If you insist, we will sell you a barrel of our Number One grade for \$4.50, freight paid to New York. Our responsibility ends with delivery to the transportation company. We believe in our Fancy Grade and would rather sell it. We think you get more for your money.



TOPSHAM QUALITY
FANCY VERMONT APPLES

be taken up after the foliage dies down in the fall. Dig them up without bruising, store in a cool, dry, sunny place (being careful to protect from unexpected frosts at night) until they are dry and well ripened, and then store, preferably in clean sand or moss, in a cool dry place, such as a cellar—but never expose to drying furnace heat. The callas and amaryllis are usually handled in pots or boxes, and may be kept in the soil, but should be dried off and rested after blooming. The turning yellow of the leaves gives notice that they are going on a strike for a while, and water should be gradually withheld, and the pots kept in a cool place.

The vegetable garden, too, demands its share of attention at the season's wind-up, even though, with the majority of vegetable gardens, it has been more or less neglected for the last month or so.

First of all clean it up. Mow off and pull up all the big weeds and burn them. The best way is to throw them in piles at once, before the seeds get dry enough to rattle out in handling, and then burn as soon as they will fire. Clean off every spot left vacant and cultivate it, or better still, plow it as deep as possible. The fall is the best time to turn up an inch or so of the subsoil to deepen the garden, as the action of winter rain and frosts will tend to break up the hard lumps and combine them with the old soil.

Where crops still occupy the ground but weeds are bad, as often happens in patches of late beets, carrots and other root crops, cut off the whole with a scythe several inches high and remove and burn, thus preventing weed seeding and making it easier to get out the crops.

Sow rye on all spots as fast as broken up; even though so late that little growth will be made, the roots will prevent washing and puddling of the soil, and enough plant food will be saved and humus added to the soil to repay several times the cost of seed.

It is a very common mistake to allow the garden vegetables not used to rot on the ground, or in it. There is a great deal of unnecessary waste in this respect, for a great many of the things so neglected might just as well be carried over into winter, and would repay handsomely the labor of gathering and storing.

There is no better place for storing vegetables than a good dry frost-proof cellar, from which ordinarily all artificial heat is excluded. Where such a place is not at one's disposal, a substitute may be had in partitioning off part of the furnace cellar, and providing ample ventilation direct with the outside air. Or a cold north room in the house, where the window can be kept open most of the time, will do excellently. In the latter case, boxes or barrels filled with sphagnum moss (obtainable for the gathering in many swampy places) make an ideal method of storing, as the moss is light

(Continued on page 268)

JULIAN A. DIMOCK, East Corinth, Vermont

Farr's Hardy Phloxes—The Late Messengers of Cheer

With their great, well-rounded, hydrangea-like clusters of starry flowers, Phloxes make a grand showing anywhere. You have room for some of them—if crowded, plant them among Peonies or Oriental Poppies; the Phloxes will not be ready until the other things are gone.

At Wyomissing Nurseries, I am growing nearly 200 kinds, both tall and dwarf. The colors touch every hue but yellow. Plant in October or November.

Irises, Peonies, Delphiniums, Etc.

—these and many others of the noble perennials are included in my extensive collection.



My aim is not to grow so many kinds as to have those that I do offer as nearly complete as possible. If you plan a garden with individuality, personality of its own, the varieties I offer will be of great worth to you.

MY NEW BOOK

describing my Phloxes and other hardy plants is practical and beautiful. Illustrated from photographs made at Wyomissing—many of them in full colors; while accurate cultural directions make it invaluable as a reference work. Free if you have a hardy garden or expect to plant one.

BERTRAND H. FARR, Wyomissing Nurseries
643F Penn Street, Reading, Pa.

The Regular Dunning Boiler

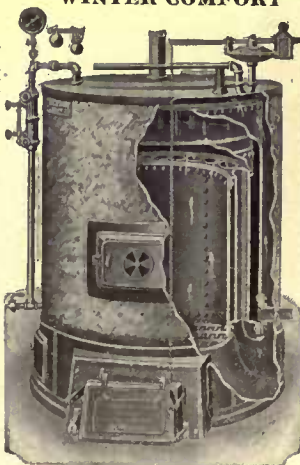
FIRST AID TO
WINTER COMFORT

Soon the weather will be cold and soon a good heating plant will be one of the most welcome inmates of your home.

With the DUNNING system of house heating you are provided reliable, uniform warmth throughout the house, and not only do you get a steady heat day and night, but you do so with the greatest fuel economy.

Have you installed the thorough heating system you promised yourself last winter? Now is the time if you haven't.

Study the cut, note the long fire travel and perfect construction, then write for our literature, a treatise on the heating question well worth while.



New York Central Iron Works Co., 5 Main St., Geneva, N. Y.

BOBBINK & ATKINS

World's Choicest Nursery and Greenhouse Products
EARLY AUTUMN PLANTING.

The proper way to buy is to see the material growing. We shall gladly give our time and attention to all intending purchasers visiting our Nursery, and invite everybody interested in improving their grounds to visit us. Our Nursery consists of upwards of 300 acres of highly cultivated land, and is planted with a choice selection of Ornamental Nursery Products, placing us in a position to complete plantings and fill orders of any size.

BOXWOOD. We grow thousands of plants, in many shapes and sizes. Everybody loves the aroma of old-fashioned Boxwood.

EVERGREENS AND CONIFERS. More than 75 acres of our Nursery are planted with handsome specimens. Our plants are worth traveling any distance to see.

RHODODENDRONS. Catawbiense, English Hardy Hybrids and Maximum. Our collection consists of thousands of choice specimens and ordinary sizes in the most desirable varieties.

HEDGE PLANTS. We have a large quantity of California Privet, Borberia and other Shrubs for Hedges.

POT GROWN STRAWBERRIES. French Four Season and all other leading varieties. Ask for special list.

LAWN GRASS SEED. B. & A. Rutherford Park Mixture remains unequalled.

TREE AND HERBACEOUS PEONIES. In the choicest varieties.

OUR NEW GIANT FLOWERING MARSH MALLOW.

This is the floricultural marvel of the age. Everybody interested in Hardy, Old-Fashioned Flowers, should visit our Nursery and see this wonderful plant, now in bloom.

OUR ILLUSTRATED GENERAL CATALOGUE NO. 40, will tell you about the above and all our other products for Lawns and Gardens.

WE PLAN AND PLANT GROUNDS AND GARDENS EVERYWHERE.

WE CAN MAKE OLD GARDENS NEW, AND NEW GARDENS OLD, WITH OUR "WORLD'S CHOICEST NURSERY PRODUCTS."

VISITORS, take Erie Railroad to Carlton Hill, second stop on Main Line, 3 minutes' walk to Nursery.

BOBBINK & ATKINS

Nurserymen, Florists & Planters.

Rutherford, N. J.

Prizes for Growing Bulbs In Our Prepared Fiber

Try planting bulbs in our Prepared Fiber, instead of soil; you will find them much easier to care for. Just fill non-porous bowls, hyacinth glasses or jardinières with the fiber, and plant as usual. Set the vessels anywhere—on tables or columns, or in halls or corridors; there will be no damage from water.

The idea was a new one in America until introduced by us two years ago, but it has been practiced successfully in England for many years. To popularize this method we make the following offers of bulbs, etc., and prizes. For full particulars see page 20 of our Summer and Autumn Guide, described below.

SPECIAL OFFERS: 3 Roman or Dutch Hyacinths and 1 Art Jardinière; or 6 Tulips, red, white or yellow, and 1 Art Jardinière; or 12 Crocus, blue, yellow or white, and 1 Art Jardinière; or 5 Paper White Narcissus and 1 Art Jardinière; or 4 Narcissus Golden Spur (yellow) and 1 Art Jardinière; or 3 Chinese Sacred Narcissus and 1 Art Jardinière, with sufficient fiber and charcoal to grow any of the above collections for \$1, three for \$2.75.

Details of Contest

To induce the growing of bulbs in our prepared fiber, we will award the following prizes for photographs of bulbs so grown and flowered, same to be submitted to us not later than May 1, 1912:

1st prize	.....\$10.00
2nd "	..... 5.00
3rd "	..... 4.00
4th "	..... 3.00
5th "	..... 2.00

A Beautiful Catalogue of Beautiful Bulbs

Our amateur Summer and Autumn Garden Guide is that, and more; it contains an article especially written by Wilhelm Miller, editor of The Garden Magazine, entitled "The Best New Idea in Gardening"—also cultural instructions of where, how and best time to plant bulbs and seeds for winter and spring flowering.

ARTHUR T. BODDINGTON

Seedsman

Dept. H, 342 West 14th Street
New York City



Have You Ever Tried Growing Orchids

YOU will find the cultivation of Orchids one of the most fascinating pleasures you have ever attempted. Wonderful results are obtained by amateur growers by following a few simple points which are explained in our Orchid Book. We send this illustrated Orchid Book upon request. It contains full information about planting and the care of this beautiful plant, with descriptions and prices of various varieties; also ten collections that are recommended most highly to beginners.



Write for our booklet, or visit our nurseries.

Cattleya Trianae
Oncidium varicosum Rogersii
Dendrobium nobile

Odontoglossum grande
Calanthe Veltchii
Cypripedium Curtisii

Special \$10 Collection for Beginners

We will send for a limited time a special collection selected for beginners, including:

All for Ten Dollars

JULIUS ROEHRS CO., Exotic Nurseries

RUTHERFORD

NEW JERSEY

Sure protection for your dining table



A good part of the price you pay for a dining table is the cost of giving it that beautiful polished top. The only absolutely certain protection for that elegant surface is a

Peerless Asbestos Table Mat

Don't risk your handsome table when you can give it this sure protection for one quarter the cost of refinishing and polishing it after it has become scarred and stained by hot dishes and spilled liquids. Ask your dealer to show you the Peerless Asbestos Table Mat—you can tell the genuine by this trade mark. If your dealer cannot supply you write to us for nearest dealer's address and our booklet "To the Woman Who Cares."



CHICAGO ASBESTOS TABLE MAT CO.

Dept. 213 215 Loomis Street, Chicago, Ill.

LEAVENS FURNITURE



Repeated orders from satisfied customers, and their frequent letters of commendation place Leavens' Made Furniture in a class by itself. It is furniture that meets every requirement of the particular purchaser. A large variety of styles, all good, and each purchaser's individual taste in finish, insure the measure of satisfaction that has resulted in a marked increase in sales during the past year.

Leavens' Made Furniture is designed on the plain, simple lines that give style and character. It is strong but not clumsy. Each piece has individuality. An inspection of unfinished stock in our ware-rooms shows how good is the material, and how honestly it is built. It is finished to your order if so desired.

A package of over two hundred prints and a color chart will show you possibilities for every room in your house. Send for them.



WILLIAM LEAVENS & CO.
MANUFACTURERS,
32 Canal Street, Boston, Mass.



HAVE ELECTRICITY IN YOUR COUNTRY HOME

Install an Alamo-Weastinghouse electric lighting set in your house. These little plants are safe, durable, economical and do not require the services of an engineer. We also install Complete Water Systems of all kinds. All of our apparatus is guaranteed. Write for our booklet entitled "Electric Light and Power for Country Home and Farm."

ALAMO MFG. CO. - Hillsdale, Mich.
Eastern Representatives, OTIS & WELLS, Electrical Engineers, 2 Rector Street, New York City,
CHAS. PFAU, Bourse Bldg., Philadelphia

(Continued from page 266)

and clean. In the cellar, clean coarse sand is generally used. This is for storing carrots, beets, parsnips and other root crops which would shrivel if left exposed to dry air.

In storing any fruit or vegetables always see to it that they are clean, dry and sound—the smallest spot or bruise is a danger center. Keep the temperature thirty-three to thirty-eight degrees, as even as possible. Give ventilation whenever possible. Watch out for rats and mice. Go over the garden and save everything worth saving.

Beans. Those still in the green state are delicious canned in modern glass jars. Those dried and partly dried may be stored vines and all, under cover, and later picked and shelled.

Beets, carrots and turnips store in sand or moss. Cut the tops off within an inch or two of the root, not close.

Cabbage and cauliflower hang up by the heels, after light frosts in the cellar. Cabbage in quantity is trenched outside.

Celery. For keeping over winter, store in narrow boxes, on two or three inches of wet sand, pack upright, close together. Leave roots and earth on; store boxes in cellar—slight freezing will not hurt.

Cucumbers, melons, egg-plants. These cannot be kept over winter, but if very carefully gathered just before the first frost and stored in a dry cool cellar they will stay in good condition for some time.

Potatoes and onions. These are stored without any covering in a cool, dark cellar—potatoes usually in a bin of convenient size. The onions will keep better if stored in slatted barrels or boxes, giving free access to air. Be sure they are perfectly dry before putting into their final storing place.

Parsley. Put a few plants in a pot or box and keep in the kitchen window.

Squash or pumpkins. Gather before frost, cutting with small piece of vine attached, handle gently as eggs, and store in a sunny, airy place where frost can be kept off. Later store in a dry, dark place, with temperature as near forty degrees as possible.

Tomatoes. Just before frosts, pick the best of the unripened fruits and place some on clean straw in coldframe or greenhouse. Put others in straw in the cellar. By this method they may frequently be had until Christmas.

The rows of spinach, onions and borecole sown last month for wintering over should be kept scrupulously clean. They will not need covering up until November, but get your supply of mulching material ready to hand.

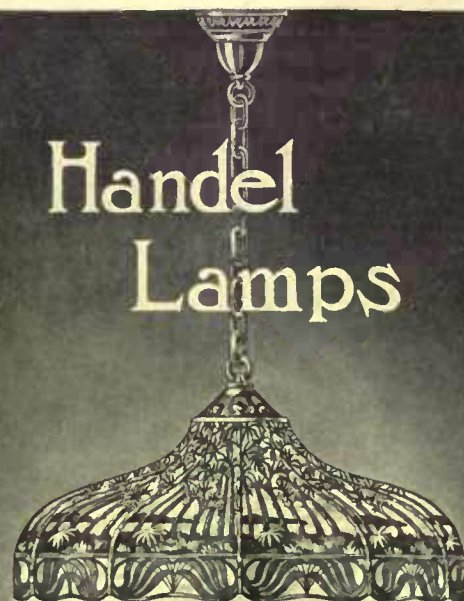
Put liberal dressings of coarse stable manure on rhubarb and asparagus beds. Put clean sand and earth on the sea-kale.

Fruit, as a general thing, is best where ripened fully on the tree, but the winter sorts, of course, do not ripen until sometime after being gathered.

You cannot be too careful in harvesting

(Continued on page 270)

Handel Lamps



ARTISTIC LIGHTING EFFECTS

THERE is a distinctiveness about Handel Lamps and Lighting Fixtures—a striking beauty and individuality of design that adds the final touch to the well-furnished room. The shades are gems of exquisite design and superb coloring.

The Handel productions comprise many styles of lamps and lighting fixtures for electricity, gas or oil. They furnish a clear, mellow light which does not tire the eyes.

The illustration herewith shows electric dome No. 5381 for library or dining room.

You may purchase Handel Lamps at leading jewelers and lighting fixture dealers. We will gladly refer you to the dealer nearest you. If you are planning the lighting of a new home or wish to improve your present lighting, our booklet, "Suggestions for Good Lighting," will give you many helpful ideas.

We shall be pleased to send you a copy upon request

THE HANDEL COMPANY

390 East Main Street Meriden, Conn.
New York Showrooms, 64 Murray Street

JACKSON Ventilating Grate

enables you to enjoy the charm of an open fire—and in addition really warms and ventilates the room. By a simple system of flues, heat can be carried to other rooms on the same or different floors.

Send for our illustrated Catalog

of grates and fire-place fixtures. It tells you how you can get the benefit of all the heat from an open fire.

E. A. JACKSON & BRO.

Incorporated

52 South Beekman St. - New York

TILE S

The Economy of Tile

When figuring on a tiled floor, do not forget that all other materials are perishable, but that tile is lasting.

You cannot wear out a tiled floor. Nothing can injure it. It is there to stay. A surface that will resist any kind of dampness or contamination.

Tile should be used in your home, not only because it is sanitary, but also because it is the most beautiful surface for building purposes in the world.

We have prepared four booklets: "Tile for the Bathroom," "Tiles for Fireplaces," "Tile for the Kitchen and Laundry," "Tiles on the Porch Floor," which we send free to home builders. You would do well to read them before perfecting your plans.

THE ASSOCIATED TILE MANUFACTURERS
Room 2, Reeves Building, Beaver Falls, Pa.



Smoky Fireplaces Made to Draw

Your particular chimney problem studied by experts, and estimates given without charge. The work is undertaken with this understanding: We will not accept payment unless successful. Kitchen ventilating systems, preventing cooking odors.

FREDERIC B. WHITLEY Engineer and Contractor
215 Fulton Street, Brooklyn, N. Y.

LAST CALL

Dutch Bulbs and Plants

direct from Holland

The best Dutch Bulbs you can buy—solid, spotless, full of vitality, true to name and color—are described in our new Dutch Bulb catalog.

It is a book worth while reading—a book that tells the difference between the big flabby bulbs which disappoint, and the big solid bulbs which give largest and best results.

It tells how to force bulbs, gives the best varieties for every purpose, tells about the newest European introductions in tulips, hyacinths, narcissi, etc.

We welcome comparison between our Dutch Bulbs direct from Holland and the best bulbs you can buy elsewhere. We know that results next Spring will bring us all your future orders.

Hyacinths, \$2 per 100 up. Narcissus (Daffodils), 75c. per 100 up
Tulips, \$1 per 100 up. Crocus, 40c. per 100 up.

Gt. van Waveren and Kruijff

American Branch House, 529 Bourse Bldg., Louis Berger, Manager
PHILADELPHIA, PA. U. S. A.
Home Offices and Nurseries, Sassenheim, (Haarlem), Holland.
Other Branches: Moscow, Russia; Leipzig, Germany; Buenos Ayres, Argentine Republic; London, England; Goteburg, Sweden.

WHITTALL'S ARABIC

THE fierceness of the tribal feuds among the Bedouins—their lust for thievery—the perils of the burning desert, together with the tedious hand methods of manufacture, have long kept the genuine Oriental Rug out of reach of the many.

☐ Whittall methods transform the same Oriental wools into fabrics quite as beautiful and durable, and within the reach of all.

☐ The nearest approach to the hand-knotted Turkish rug yet produced in this country is

Whittall's Arabic

with its high, luxurious pile, exquisite designs and soft, yet permanent colorings, imitating closely the priceless antique.

☐ These rugs are unrivalled for living rooms, dining rooms, dens, halls, offices, libraries and public buildings.

☐ The name WHITTALL'S woven into the back of a rug or carpet is your guarantee of highest quality at a moderate price.

“ORIENTAL ART IN AMERICAN RUGS”

is a thirty-two page art booklet, giving interesting Oriental descriptions and illustrating many types of Whittall reproductions, containing helpful ideas and suggestions for floor coverings. Sent free upon request.

RUG CARAVAN ATTACKED BY ARABS

M. J. WHITTALL
DEPT. S
WORCESTER · MASS.
ESTABLISHED · 1880.

PLANT NOW EVERGREENS

Blue Spruce—Junipers—Pines—Retinospora—Hemlocks—Boxwood—Arborvitae—(Imported and Domestic Dwarf and Large specimens).

PERENNIALS

More than 150 varieties, including Bleeding Heart—Phlox (larkspur, foxgloves)—Peonies—Boltonias—Veronica—Iris and other favorites.

Write for Lists and Catalog.

WADLEY NURSERIES

Bound Brook, N. J.

THE great secret of the successful flower garden lies in the generous use of perennials well massed. *Right now* is the time to set out these plants in order to have a notable garden this coming season. *Right here* is the place to get sturdy plants that will come true to color and type, and at *wholesale rates*.

Get in touch with us at once to make sure of that distinctive garden you want for next year.

Palisades Nurseries, Inc.
SPARKILL, N. Y.



Helps the wear

of Auto tires; makes them look new, too. Abroad, everybody is using water paint. Here they are using

French's London White

"Whitire"
(Trade Mark)

It's a wonderful preserver. Discriminating Americans are strong for it.

Quickly and easily applied. Can sufficient for 5 months, \$1.

Special Trial Can enough for 4 tires **25c.**

(This offer is limited)

SAMUEL H. FRENCH & CO
410 Calowhill St.,
Philadelphia,
Pa.



Iron Railings, Wire Fences and Entrance Gates of all designs and for all purposes. Correspondence solicited: Catalogs furnished.

FENCE

Tennis Court Enclosures, Unclimbable Wire Mesh and Spiral Netting (Chain Link) Fences for Estate Boundaries and Industrial Properties—Lawn Furniture—Stable Fittings.

F. E. CARPENTER CO., 253 Broadway
New York City

The Morris Nursery Co.
WEST CHESTER, CHESTER CO. PENNA.
ESTABLISHED 1849

Over 250 Acres in Fruit, Ornamental and Evergreen Trees, Shrubs, Vines, Roses, Perennials, etc.

Write for Price List and Catalogue

LANDSCAPE WORK A SPECIALTY

THE comfortable easy chair needed in your Bedroom or Living-room, the inexpensive, yet indispensable, tea-table or work-table that can be readily moved about, will be found among our new patterns in

Hand-Wrought Willow Furniture

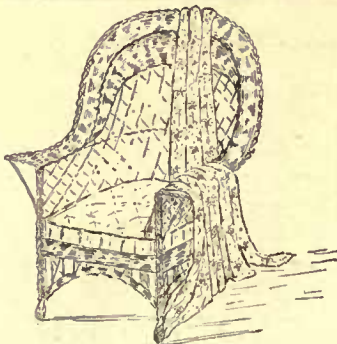
or among the quaint reproductions of antiques which we have gathered together on our second floor.

Sketch Sheets, showing our full stock of Hand-wrought Willow Ware, with price-list, mailed free on request. Selections returnable if not satisfactory.

Walter J. Brennan Company

Odd pieces of furniture, artistic draperies and gift articles not found in other shops.

436 Lexington Ave., Opposite Grand Central Station, New York



(Continued from page 268)

fruit. Careless picking and packing may show no bad results at the time, but every bruise, no matter how slight, is likely to develop into a rot spot under the first favorable circumstances, and spread ruin to the lot.

Apples and pears should be kept in a cold, dark place, where the air is moist, but never wet, and where the temperature will not go below freezing. They should be stored loosely, not more than half a foot or a foot deep, on slatted shelves. If such conditions cannot be given, and they must be kept in a dry, heated place, pack, using only perfect fruit, in tight boxes or barrels, or in sand, moss or leaf-mould to prevent shrivelling.

The strawberry bed should be mulched with bog hay or straw, after the ground freezes, but before severe weather. Cover the plants about two inches deep and two or three between the rows.

The cane fruits, raspberries, blackberries and dewberries, should be protected in cold climates—New York and north—by laying down. Bend them over near the ground and hold in place with a shovelful of earth on the tips. Hay, cornstalks or even soil may be used for mulching, but it should not be put on until after the first frosts.

Examine currant bushes for the borer, whose presence is indicated by a wilted brownish appearance.

It may seem that all this constitutes an unconscionable number of things to attend to, but the truth of the matter is that these things attended to now will save a multiplication of jobs later. Look over the various suggestions made above, make a list of those covering your own case, and if you can manage to attend to one each day you will soon find them cleared up.



Putting On the Winter Garb Indoors

(Continued from page 214)

that it is possible to find fabrics of these lines to employ in almost any color scheme. The colors are practically permanent.

Monk's cloth, from the lightest to the heaviest weight, admits of many good treatments for window draperies and portieres. Stencils outlined in embroidery or simply the stamped pattern without the outline, or motifs cut from another fabric may be successfully applied to this much used material.

The manufacturers of wall papers, rugs and fabrics are becoming keenly alive to the needs of an each year more discriminating public. The fall showing of fabrics and carpets gives one great hope for the artistic future of American homes. The subtle delicate shades would not be manufactured if they were not wanted, and they must be wanted by a large percentage of the people, to have the call for them penetrate the walls of the manufac-



50 BULBS CENTS BARCLAY ST.



PREPAID

The following collection of well ripened first size bulbs contains some of the most popular varieties, and may be planted indoors

or outside. This collection of bulbs, sold at half the actual cost price, is offered in order to get you acquainted with our High Quality Bulbs for Fall Planting.



COST PRICE

6 Dutch Roman Hyacinths.	\$.25
6 Single Yellow Tulips	.... .10
6 Single Red Tulips	.... .10
6 Pheasant's Eye Narcissus	.13
6 Double Yellow Daffodils.	.14
6 Crocus Mixed	.... .08
6 Spanish Iris	.... .10
8 Snowdrops	.... .10

Cost Price \$1.00

Our Special Offer, Prepaid \$.50

Catalog of Best Bulbs for House and Garden Planting Free on Request



Stump & Walter Co.

50 BARCLAY STREET
NEW YORK

"DOGS IN AMERICA"

(Illustrated)

This bi-monthly caters to Fancier and Novice alike. Special articles and typical dogs exemplified. Full reviews of shows. The one dog man a particularly welcome subscriber.

Annual Subscription \$2.00

Address "DOGS IN AMERICA"

406 World Building New York



SEWAGE DISPOSAL

Without Sewers

FOR COUNTRY HOMES

Illustrated Booklet Free

Address

Ashley House Sewage Disposal Co.
116 Armida Ave., Morgan Park, Ill.

IRON AND WIRE FENCES

Fences of all descriptions for City and Suburban Homes. Write today for our Loose Leaf Catalog, stating briefly your requirements.

Fence Department

AMERICAN WIRE FORM CO.

100 Church Street

NEW YORK CITY

APPLE GROWING

The healthier the tree, the better the fruit. The longer trees are sprayed with "Scalecide," the more beautiful, healthful and fruitful they become. "Scalecide" is the acknowledged leader of all soluble oils—the only one containing distinct fungicidal properties. "Scalecide" will positively kill all soft-bodied sucking insects without injury to the tree. Let us prove these statements. Send today for free booklet "Scalecide—the Tree Saver." Address B. G. PRATT CO., Mfg. Chemists, 50 Church St., N. Y. City.

EVERYTHING for the HOME GROUNDS

Ornamental, deciduous, shade and weeping trees, Flowering shrubs, Barberry, Privet, Evergreens, Conifers, Hardy trailing vines, Climbers, Fruit trees, Berry bushes, Hardy garden plants, etc. The finest selection for lawn and garden planting in America. More than 600 acres of choicest nursery produce. We will make a planting plan of your place, selecting trees, shrubs, etc., suitable to soil and situation, and give you the exact cost of planting and proper time to plant. Send for Catalog D.

The Stephen Hoyt's Sons Company

Established 1848 New Canaan, Conn. Incorporated 1903

The Montrose Nurseries are Offering

A complete line of choice Ornamental Stock at very low prices considering the quality.

Large trees and shrubs for immediate effect.

Landscape work a specialty.

Illustrated Catalog free for the asking.

THE MONTROSE NURSERIES

MONTROSE

Westchester., Co N. Y.

THE best varieties of Irises, Phlox, Paeonies, Shrubs, and Hardy Perennials for fall planting. Send for circular.

RALPH E. DANFORTH

East Jaffrey,

New Hampshire



ROSEDALE NURSERIES



A FAMOUS COLLECTION

—OF—

PEONIES, IRIS and PHLOX

Now ready for planting, to bloom from May to October, 1912; also a full line of superior Trees, Shrubs, etc.

Catalogue No. 30 on request

ROSEDALE NURSERIES

TARRYTOWN, NEW YORK



Lest You Forget

about those TREES, EVERGREENS and SHRUBS you intended planting.

SEPTEMBER and OCTOBER are the best coming months to plant in.

WE OFFER SOME MORE

Bargains at Half Regular Prices

Large Box Trees	Paeonies
Large Blue Spruce	Hardy Vines
Rhododendrons	Large Fruit Trees
Lilacs	Hardy Roses
German Iris	and many other varieties

Special Half-Price Bargain List
mailed free on application

LARGEST STOCK OF RARE TREES
AND EVERGREENS

Rose Hill Nurseries

Please mention House and Garden

NEW ROCHELLE, N. Y.

There is yet time for you to plant our PRIZE PEONIES

Let us send you our list of selected PEONIES, IRIS, and PHLOX with which we again this year took eight first prizes out of nine entries made at the exhibits of the Massachusetts Horticultural Society and elsewhere.

(We also have a choice collection of hardy, northern grown evergreens and deciduous trees.

T. C. THURLOW'S SONS, Inc.

WEST NEWBURY, MASS.

"CRAFTSMAN"

HOUSE PLANS FREE



Designed by GUSTAV STICKLEY

Send 6 cents for a copy of "24 CRAFTSMAN HOUSES" showing exterior and floor plans of 24 houses that cost from \$500 up to \$1000. To interest you in our magazine, "THE CRAFTSMAN" our FREE HOUSE PLANS, and in Craft articles, we will also send you a beautifully printed 32-page booklet entitled "The Craftsman House." If you are interested at all, both of these books will be very useful to you.

"THE CRAFTSMAN IDEA" means real homes, not mere houses; it shows you how to save money on useless partitions—how to avoid over-decoration, how to get wide sweeps of space (even in a small house), restful tones that match and blend—and enables anyone to always have a beautiful and artistic home.

"THE CRAFTSMAN MAGAZINE" treats of building, furnishing and beautifying homes—of art—embroidery—cabinet work—and kindred topics. In the Magazine each month are published the plans of two new and entirely different houses. Already we have shown 125 houses, and you can have your own choice.

"CRAFTSMAN HOMES," by Gustav Stickley, 205 pages, beautifully bound and printed, treats of home building, home making, home furnishings in full.

EDGAR E. PHILLIPS, Manager THE CRAFTSMAN
Room 264, 41 W. 34th St. New York City

☆ WHITE STAR LINE ☆



TO THE Glorious
Mediterranean

Regular Sailings from New York & Boston
INCLUDING

The Mammoth "Adriatic" and "Cedric,"
The Largest British Steamers in the Trade

☆ Special Early Winter Sailing ☆

Mammoth
24,541 Tons
725 ft. Long

"ADRIATIC" ☆ Dec. 2

New York—Madeira—Gibraltar—Algiers—Naples

Superb Equipment ☆ Elevator ☆ Turkish and
Electric Baths ☆ Gymnasium ☆ Swimming Pool

Midwinter Pleasure Voyages

New York—Riviera—Italy—Egypt

Via Azores, Madeira, Gibraltar, Algiers

"ADRIATIC"

(24,541 TONS)

January - - 10

February - - 21



"CEDRIC"

(21,035 TONS)

January - - 24

March - - - 6

FOR FULL DETAILS APPLY TO

9 Broadway New York WHITE STAR LINE 84 State St. Boston

Philadelphia, Washington, Chicago, St. Louis, San Francisco, Seattle, Winnipeg, Minneapolis, Toronto, Montreal, New Orleans, Quebec, Halifax.

tories. Too often the motto of the manufacturer has been based on commercialism, and the artistic value of an article has been merely an afterthought.



The Last Word on Spring Blooming Bulbs

(Continued from page 216)

take extra precautions to keep their stocks in good health, and this trouble is far less common than it used to be. The majority of the bulbs are tested for disease before shipment, by cutting a thin slice from the side of the bulb at the top. This cut does no harm to the bulb; the first yellowing sign of decay is thus discovered, and all affected bulbs are destroyed. The healed scar from this cutting is plainly discernible on many of the bulbs one buys.

Besides squeezing the bulb, a test with the nose is a valuable aid in determining a bad hyacinth or tulip bulb, for when either of these two goes bad it can give cards and spades to any potato that has spoiled.

Basal rot is more common among daffodils than it ought to be, some varieties being especially liable to the disease. The trumpet sort Horsfieldii is very likely to be diseased in Holland grown stocks, but those from England or Guernsey are not so badly affected. This sickness may be detected by examining the base of the bulb. If smaller bulbs are attached, these may be gently bent aside, or broken off, when necessary, and if a brown discoloration, soft to the pressure of the finger-nail, is observed, disease is present. The rot spreads from the base of the bulb upward through its center, so that very often a hasty examination will not reveal whether the bulb be sound or not, but a fairly hard squeeze will cause a badly affected bulb to split open, and the brown, rotted center will come to light.

It must be remembered, however, that both the growers and the retail dealers take every precaution to send out sound bulbs, and that these hints are not meant as a warning against a conscienceless trade, but rather as a safeguard against the infrequent bulb which escapes the watchfulness of the practised dealer. Where a gap in the beds or borders can be avoided by examining the bulbs to be planted, the extra care is well expended.

Crocuses have a way of turning hard, if left out of the ground too long; indeed, they require to be planted as soon as they are received, if they are to do well. This hardening can be recognized by peeling off the skin of the corms and nicking them with a knife. All small bulbs shrivel very rapidly, and they must be planted early.

Furthermore, it is scarcely just to the man who sells bulbs to expect that the American climate will not have its effect upon bulbous plants. A remark often heard is that "my bulbs did splendidly last

season, but this year they have done wretchedly." Too many gardeners presume that their tulips and hyacinths will flower year after year under wholly uncongenial conditions. In Holland, hyacinths are grown in very nearly a pure sandy soil, where there always is water at only a short depth below the surface. In loamy soils it is impossible to keep them in proper vigor, and many of the bulbs soon disappear entirely. Tulips are grown in heavier soil, but in a climate very different from ours, and in the case of the early tulips, one year, or two years at most, is the limit for their healthy existence. The late tulips do better, but it is wrong to suppose that even they go on forever. A few of the Cottage tulips are fairly permanent, *Gesneriana Spathulata* being one of the surest in this regard.

Much depends upon the age of the bulb. Tulips and hyacinths break up into a number of small bulbs after a certain length of time, a result of matured growth of the parent bulb. Of course, there is no way to tell from the bulb itself just when this senile decay is going to set in, but most of the growers are careful to furnish stock which is still young and vigorous, so that breaking up is not likely to occur the first year after planting.

The question of cost bears a very intimate relation to that of quality so far as all bulbs are concerned. I am always prepared to see poor flowers when my friends urge me to look at some bulbs cheaper than they have ever had. Poor bulbs always cost as much to grow as good ones do, and this cost does not vary much from year to year. The best bulbs are in demand by those who know high grade stocks, and good prices can always be obtained for the pick of the crop. Second size bulbs are always less expensive, and the choicest quality does not often come to this country, because our American buyers have yet to learn that in bulbs, just as in other merchandise, the highest quality cannot be bought for the proverbial song, and they put up with an inferior grade because they are still unwilling to pay for the best. The Englishman has had his garden long enough to give room in it only to what is worthy of it, so he puts his hand a bit deeper in his pocket and orders the best that Holland grows.

I must not neglect the one word more to persuade the interested reader to select his varieties wisely. Many of the older varieties, among the hyacinths and tulips especially, have now outlived their usefulness or have been superseded by newer sorts. Why the older and inferior kinds still appear in our catalogues is something of a puzzle. Disappointment is surely in store for the purchaser who lights upon one of these passing favorites, for the fault of small blossoms, waning vigor or sallow complexion will be a glaring defect in what might be a wealth of beauty.

Nowadays that old standby in the early tulips, Belle Alliance, is passed over by those who come to see my tulips, and their attentions are paid to the glowing color,

James McCreery & Co.

23rd Street

34th Street

INTERIOR DECORATION

Orders taken for furnishing single rooms, suites or entire houses.

Furniture:—Fine Mahogany, Walnut and Enamel finish in Colonial, Sheraton and Chippendale reproductions.

Craftsman Furniture sold exclusively by James McCreery & Co.

23rd Street

New York

34th Street

Dutch Bulbs

Direct from the Growers

NOW IN STOCK. A FULL SUPPLY OF EVERY DESCRIPTION.

CATALOGUE SENT UPON REQUEST.

Franken Bros., Deerfield, Illinois

DON'T READ AT RANDOM

This is better than not reading at all. But there is a still better way. Take the Chautauqua plan for the use of spare moments. Put system into your reading. Four comparatively easy but most helpful books, all relating to one principal subject for the year. Four years, to complete the course, if you should continue so long, and you probably would. An illustrated monthly magazine, called "The Chautauquan Magazine of System in Reading"—a source of helps and hints for home study. Membership in a great brotherhood of those who aim at self culture and help to others.

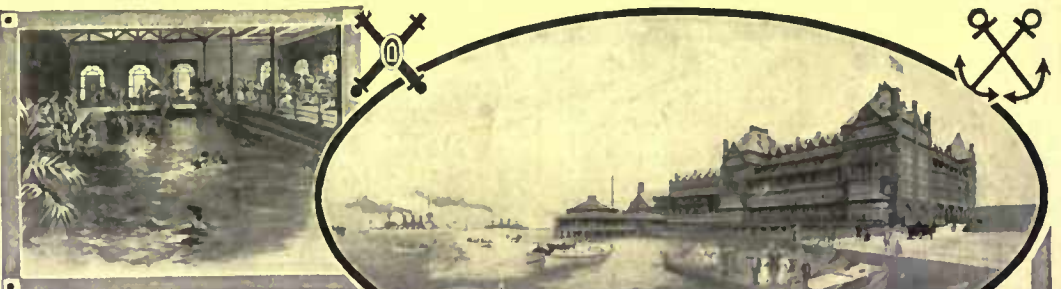
All these advantages, at a cost of \$5.00 a year, because money making is not behind the plan. For particulars, address, CHAUTAUQUA INSTITUTION, Chautauqua, New York.

Hunt Big Game

Don't hesitate because inexperienced. Go this year, while there are still a few places left where you will see game that has never been hunted and have your hunting all to yourself. I can show you Mountain Sheep, Caribou, Moose, Grizzly Bears, in a country where no other white man has ever been and the game has not become dwarfed from the conditions which always arise after hunting is started. I make all arrangements, and personally manage expedition, preserve trophies, etc., as hunter companion; advise as to purchase of fire-arms and cameras and give instruction in shooting and wild game photography. References.

Address:— C. T. S.

Care of House & Garden



HOTEL CHAMBERLIN

At Old Point Comfort, Virginia

Get in shape for the hard work ahead by spending a few of these beautiful Indian Summer days at Old Point

It is beautiful here at any season of the year, but the gorgeous glory of our Autumn days beggars description.

The air is crisp—bracing. The fields and Forests are a riot of color. Trips through the historical surrounding country are never more enjoyable. Golf, Tennis, Driving, etc., are at their best now. Conditions at The Chamberlin are ideal for real rest and recreation.

MEDICAL BATHS—the finest—most completely

equipped. In the treatment of Insomnia, Nervousness, Rheumatism, Gout and kindred disorders, nothing is more highly recommended or so efficient as the various Medical Baths. At The Chamberlin there are Medical Baths of every description. Electric Cabinets, Nauheim Baths, Dr. Baruch's System, Massage and Tonic Baths, all under the supervision of our resident physician, who is an expert in this line.

Aside from the Medical Baths The Chamberlin has the finest indoor Sea Pool in America.

For Booklet and full information address

GEO. F. ADAMS, Manager, Fortress Monroe, Va.

New York Office, 1122 Broadway



Are You Building?

Bear in mind that it is the manner in which your woodwork is finished more than the quality of the wood itself that gives you artistic interiors. Johnson's Wood Dye makes inexpensive soft woods such as Cypress, Red Gum, and others, just as artistic and beautiful as expensive hard woods.

Johnson's Wood Dye

is made in fifteen artistic shades, as follows:—

- | | |
|------------------------|-----------------------|
| No. 126 Light Oak | No. 131 Brown |
| No. 123 Dark Oak | No. 132 Weathered Oak |
| No. 125 Mission Oak | No. 132 Green |
| No. 140 Early English | No. 121 Moss Green |
| No. 110 Bog Oak | No. 122 Forest Green |
| No. 128 Light Mahogany | No. 172 Flemish Oak |
| No. 129 Dark Mahogany | No. 178 Broken |
| No. 130 Weathered Oak | No. 120 Fumed Oak |

Johnson's Wood Dye is endorsed by architects, contractors, painters and home owners everywhere. We will gladly mail you

Book and Wood Panels FREE

Tell us the kind of woods you plan to use and we will mail you panels of those woods artistically finished—also ask for booklet H G 10 "Specifications and Instructions For Finishing New Woodwork and Floors"—all free and postpaid. Write for them today. Address.

S. C. Johnson & Son
"The Wood Finishing Authorities"
Racine, Wisconsin

Are you Thinking of Decorating or Furnishing?

Talk with me. Costs nothing. May interest and help you. Put your ideas with mine; then alterations, decorations, etc., become beautiful and satisfactory. Personal supervision, town or country anywhere. Artistic results certain.

Write or 'phone me.

H. P. FREAR

18 W. 34th St., Astor Ct., N. Y., Tel. 4548 Murray Hill

HOWARD Dustless Duster

(25 Cents Prepaid)

Makes possible a dustless home. Write for our Dust Book "A" and small free sample.

It will show you how to make dusting a pleasure, how to dry clean a silk skirt in five minutes, how to clean windows in a twinkling, to polish pianos and highly finished furniture, to make cut glass sparkle like diamonds, to make an old derby look like new.

Money back if not satisfactory

HOWARD DUSTLESS DUSTER CO.
164-43 Federal Street, Boston, Mass.

HOWARD

DUSTLESS DUSTER



"No Oil to Soil"

ANDIRONS FOR EVERY ENVIRONMENT

Your home should have an atmosphere of comfort and refinement. A cheerful fireplace with proper accessories will do more to give a room character than anything else.

Graf Fireplace Fixtures give a fireplace interest. They are made in a wide variety.

Be the prevailing note of your room Colonial, Dutch, French, Mission, or of any other type or period, we can supply the proper fixtures.

Write for our illustrated booklet "Fireplace Fixtures." It shows Andirons, fenders, seat fenders, smokeless gas logs, wood boxes, etc.

Write us NOW. Our book "Fireplace Fixtures" is FREE.

FRANK H. GRAF MANUFACTURING CO.
323 Seventh Ave. New York City

POT GROWN STRAWBERRY PLANTS

planted now will give a full crop of luscious fruit the coming spring. October and November are ideal months for the growing of plants. Ten best kinds, early, medium, late, the best for most localities; per dozen, 50 cents; per 100, \$3.00.

GERMAN IRIS

A collection of 24 kinds, every one the best in its color; selected from a large list through 25 years of experience; per dozen, \$1.50; per 100, \$8.00.

J. L. SCHILLER

TOLEDO, O.

A Furnace Only 51 Inches High

With more heating surface and capacity than ordinary furnaces of larger size, making it possible to get a rise in heat conducting pipes that is so desirable and necessary. This principle is well recognized, but its application is new because the INTENSE is the latest scientific furnace put on the market.

INVESTIGATE INTENSE FURNACE AT ONCE THE

"Distributed Draft—Pure, Dustless Air"

Its distributed draft and patented check damper insures great fuel economy. The surfaces are self-cleaning; no dust or soot can accumulate or get into living rooms. It has vast radiating surface; a simple hot water attachment; a knocked down square jacket and other features your furnace man will recognize. Note portable ash pan—a great convenience. Two sizes for ordinary requirements. Arranged in batteries for larger buildings. *ASK why this is done.* Send us Architect's and Dealer's name and ask for booklet and full particulars. We will send free a "Physician's Treatise on Warm Air Heating and Ventilation."

THE G. J. EMENY CO.

51 Hubbard Street, Fulton, N. Y.



the perfect form and greater size of Maas, Sir Thomas Lipton, or the very newest Brilliant Star. L'Immaculée appears quite outclassed by the White Joost van Vondel or White Hawk. Golden Queen causes such a good oldtimer as the yellow Chrysolora to be utterly scorned, and Cottage Maid seems to be remembered only by the beauty the faded spinster had in her early teens, and the praise once lavished on her is now shared by Le Matelas, Pink Beauty and the delicate Queen of the Netherlands. Everyone of these newer varieties is well worth trying out with an idea to choosing varieties to take the place of these outworn sorts. When our own tastes are suited and we have found the best kinds for our purpose, we are more willing to give the dealers the dollars they are worth.

Hyacinths, daffodils and crocuses ought to be planted as soon as received, the daffodils being especially impatient of rest. The tulips should go into the ground at about the time that the leaves of the deciduous trees begin to fall. I have found that early planting of tulips is often inadvisable when a cold spring follows, for the bulbs have started growth so promptly that they are nipped by frosts. If it is impossible to plant at the proper time, spread out hyacinths and narcissi in a cool, dry cellar, and keep the crocuses and tulips in the bags in which they are packed.

The bulbs of hyacinths and tulips should be planted six inches apart each way, and the daffodils from four to seven inches according to the size of the bulbs. In planting crocuses, scillas, Spanish irises and other small bulbs, the distance apart is not of such great importance. An effective way to space them is to take a handful from the bag and drop them where desired, planting the bulbs as they then are. A natural grouping is the result of such a method, particularly when the bulbs are used for naturalizing.

Tulips should be set five or six inches deep, measuring to the base of the bulb; the greater depth is best for all the late kinds. Hyacinths do best at a depth of about six inches. Since the bulbs of Narcissi vary greatly in size, they may be planted at a depth equal to two and one-half times the length of the bulb, measured from its base to the neck, just where it begins to swell out into its rounding shape. All plants with small bulbs should be covered with three or four inches of soil. In very heavy soils an inch may well be taken from these figures.

A covering of some kind is advisable for all bulbs, not so much to keep out the cold as to protect them from the alternate freezing and thawing, which tears the roots and frequently lifts the bulbs quite out of the ground. For this purpose nothing is better than a mulch of some four inches of leaves, put on as soon as a thin frozen crust has formed over the beds or borders. This cover must be removed promptly at the approach of milder weather in March.

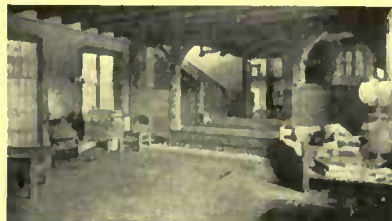


TRIAL OFFER THE HOUSE BEAUTIFUL

WITH
COMPLIMENTARY PORTFOLIO

If you have ever wondered what color to paper your dining-room—or what disposition to make of an attic chamber, or how best to treat a staircase or veranda—then you will find great assistance in the beautifully illustrated pages of this charming magazine.

"The House Beautiful" tells you by word and picture what others have done toward making



A Greatly Reduced "House Beautiful" Illustration

their homes both distinctive and livable. Profiting by their examples, you can go a step further and achieve effects in your home that would be impossible without the invaluable information you receive month after month from "The House Beautiful."

30 Day Offer

The subscription price is \$3.00 per year. But to introduce The House Beautiful to new readers we will send you for just \$1.00, The House Beautiful for five months beginning with the current issue and make you a present of "The House Beautiful Portfolio of House Building, Furnishing and Decorating." This Portfolio is a collection of color plates picturing and describing homes and beautiful interiors which are unusually successful. The Portfolio alone is a prize which money could not ordinarily purchase. To avail yourself of this offer, cut out the attached coupon and after filling in your name and address pin a one dollar bill to it and mail To-Day to

THE HOUSE BEAUTIFUL, Room 1716, 315-4th Ave., N. Y. City

I accept your 30 DAY OFFER and request that you send me The House Beautiful for FIVE months, and also your Portfolio of House Building, Furnishing and Decorating. Enclosed find \$1.00.

Name.....
Street.....
City..... State.....

Ellen Shipman—Garden Expert
Cornish Hills - New Hampshire

WILL MAKE AND SUPERVISE WORKING
PLANS AND PLANTING OF GARDENS, OR
FOR SMALL GARDENS WILL MAKE SUG-
GESTIONS AND SKETCHES BY LETTER.

P. O. ADDRESS

PLAINFIELD - - NEW HAMPSHIRE

\$ 1 50

Mailed before October 31, 1911

Secures a
Year's Subscription to
PEARSON'S,
The LADIES' WORLD
and
THE MOTHERS'
MAGAZINE

Subscription Value, \$2.75

Two Big Subscription Bargains For All Who Act Promptly

\$ 1 60

Mailed before October 31, 1911

Secures a
Year's Subscription to
PEARSON'S
and
THE HAMPTON-
COLUMBIAN
MAGAZINE

Subscription Value, \$3.00

The above special offers afford the maximum value in subscription bargains. Publications in either offer may be ordered to one or different addresses.

Special Note No. 1—Commencing with the October issue, Hampton's and the Columbian Magazine will be merged as one periodical and published under the title of "Hampton-Columbian Magazine." This means a big treat for periodical readers, as the publishers have decided to present in the combined publication all the features and fiction contracted for by both Hampton and the Columbian. In fiction alone, this means a new standard in magazine values, as with the October number the Hampton-Columbian Magazine will commence a stunning serial by Rex Beach, also another serial by Sir Gilbert Parker. **Every lover of clean, healthy fiction** should take advantage of our special Pearson, Hampton-Columbian offer at \$1.60.

Special Note No. 2—The \$1.50 offer covers the entire range of periodical reading. It supplies twelve copies each of three publications (thirty-six in all) for the price of Pearson's alone.

For the benefit of those who wish to order other publications in connection with the above, we present the following:

"Travel" with either offer \$2.70

	OUR SPECIAL PRICE		OUR SPECIAL PRICE
PEARSON'S,		PEARSON'S	
LADIES' WORLD		and	
and		THE HAMPTON-	
THE MOTHERS'		COLUMBIAN	
MAGAZINE		MAGAZINE	
With		With	
Ainslee's	\$2.60	Ainslee's	\$2.70
Century	5.35	Century	5.45
Delineator	2.35	Delineator	2.45
Everybody's	2.60	Everybody's	2.70
Field and Stream	2.60	Field and Stream	2.70
Harper's Monthly	5.00	Harper's Monthly	5.10
Lippincott's	3.25	Lippincott's	3.35
McClure's	2.60	McClure's	2.70
Metropolitan	2.50	Metropolitan	2.60
National	2.60	National	2.70
Outing	3.85	Outing	3.95
Pictorial Review	2.30	Pictorial Review	2.40
Recreation	3.25	Recreation	3.35
Review of Reviews	3.25	Review of Reviews	3.35
St. Nicholas	4.35	St. Nicholas	4.45
Scribner's	4.50	Scribner's	4.60
Success	2.50	Success	2.60
Woman's Home Companion	2.60	Woman's Home Companion	2.70
World's Work	3.35	World's Work	3.45

Don't fail to note that these subscription bargains are good only until October 31, 1911, and that an additional charge is made on Canadian subscriptions.

ADDRESS ALL ORDERS TO **PEARSON'S MAGAZINE, 425 to 435 East 24th St., N. Y. City**

YOU ARE A LOVER OF THE BEAUTIFUL

That is one of the many reasons why you should subscribe to **ARTS & DECORATION**, the standard magazine of moderate price and large circulation for all Americans interested in art.

It expresses that appreciation of art which marks the higher development of American life.

The magazine is most beautifully printed and illustrated on the finest paper, befitting the beauty of the subject with which it deals. You will find it a valued addition to your library table.

Write your name and address across this advertisement, send it with a dollar bill for a six months' trial subscription

\$2.00 a year

ADAM BUDGE

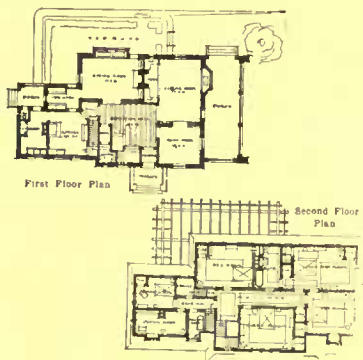
20 cents a copy
16 East 42nd Street, New York

Important to Those Who Expect to Build



When planning to build, you will find it of great value to first make a careful *personal* study of the illustrations of houses, etc., that have been designed and built by a number of leading architects, and to also learn *their* ideas regarding the best interior arrangement and the most appropriate furnishings.

This important information, which would greatly aid you in deciding about *your own* building plans, when you take them up with your own architect and builder, can easily be obtained from the *several hundred* exterior and interior, designs that are beautifully illustrated in the last six numbers of the



Architectural Record

The National Magazine for Architects, Owners and Builders. A Powerful Business-Producer for those firms whose products are used in building-construction or equipment. Guaranteed circulation exceeds 10,000 monthly.

In these six numbers are also illustrated and described the numerous building specialties that add very much to the comfort, convenience and value of the modern home, without materially increasing the initial cost; and this information may mean the saving of many dollars to you.

OUR SPECIAL OFFER

We have a limited supply of these sets of six numbers, which are invaluable to those who expect to build or make alterations. Although the regular price is \$1.50, we make *you* a special offer of \$1.00 for the six, while the sets last, if you will mention House & Garden. They will soon be sold. Send us your order today, tomorrow may be too late.

This \$1.00 Should Save You Hundreds

THE ARCHITECTURAL RECORD
146 Metropolitan Annex, New York

Enclosed is \$1.00, for which please mail your last six numbers, according to special offer in House & Garden.

Name.....
Address.....



IN OBER-AMMERGAU

An every-day scene in one of the streets of Ober-Ammergau, the home of the Passion Play. The townspeople are wood carvers and the ox carts seen are bringing in billets for fashioning into various articles. The Chalet with roof weighted with stones is typical of the homes in this mountainous region. Let TRAVEL bring you on fascinating journeys to such quaint places as this

A Magazine that Takes You There

THERE is no place that you will not visit, there are no people whom you will not know if you read TRAVEL. You go everywhere, seeing the world as though you were actually traveling. Not only will this keenest of pleasures be yours, but you will get the breadth of culture and a knowledge of the world that only travel can bring. In fact you will have greater advantages for seeing the interesting and important things than if you were actually touring, because in a decade of journeying you could not see the places and people that you will visit through TRAVEL in a single year. Moreover, you are brought into out-of-the-way places that are not on the itinerary of the ordinary traveler. If you read TRAVEL you become a citizen of the world—a thorough cosmopolitan.

THE VARIETY OF TRAVEL One of the delightful things about TRAVEL is its variety of contents. A single issue may take you on a coaching trip through the charming Devonshire Country in England and at the same time bring you on a visit to the Veddas of Ceylon, those fast dwindling aborigines of this storied isle. In the same number you might steam up the Rhine, viewing its castles famous the world over and drop in at Siam and traverse the land of the elephant. And wherever you go you are charmed with your trip—you see the people, you ramble over the country and see all that is interesting and worth while. The places and people live for you.

In entertainment and educational advantages, no magazine in the country can compare with TRAVEL. To the man or woman of breadth, it is as necessary as anything that contributes to culture and refinement.

500 Pages of Fascinating Travel Articles a Year
1500 Superb Travel Pictures from Every Continent

25c. a copy. \$3 a year

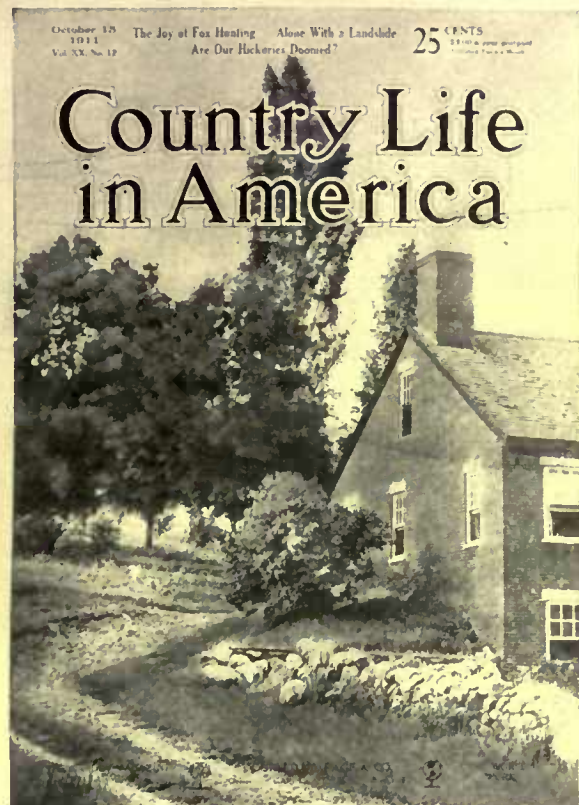
McBRIDE, NAST & CO., Publishers
449 FOURTH AVENUE - NEW YORK CITY



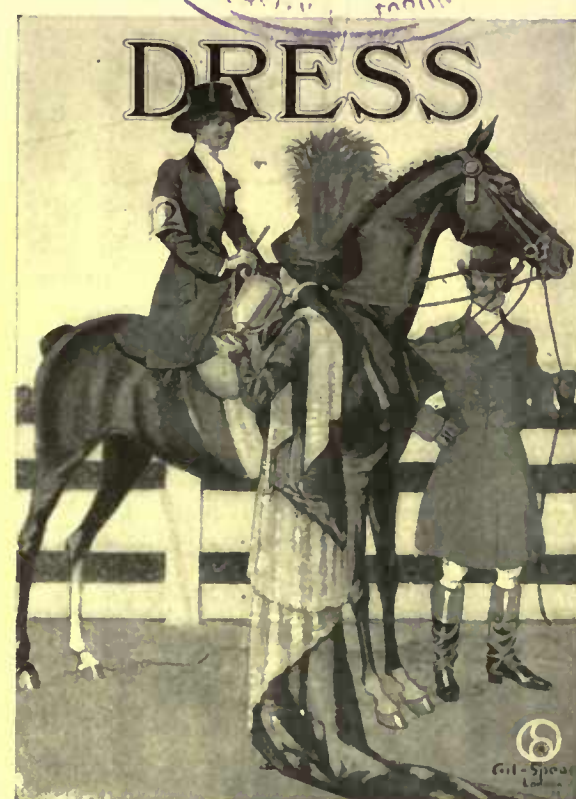
INEXPENSIVE HOMES OF INDIVIDUALITY DE LUXE EDITION

This little book of 64 pages contains 108 illustrations and floor plans of the best houses of moderate size built to-day. "Inexpensive Homes of Individuality" offers an exceptional opportunity of studying in detail some of the best designed small houses of various architectural types the country over, ranging in cost from two to eight thousand dollars. It is printed on the best stock, superbly illustrated, and contains an introduction on the "Choice of a Style for the Country or Suburban Home" by Frank Miles Day, Past President of the American Institute of Architects. It is a lasting source of inspiration and suggestion. Price 25 cents postpaid.

McBRIDE, NAST & CO., Publishers, 449 Fourth Avenue, New York



\$4.50
for a
year to
both,
if your
order
reaches
us by
Novem-
ber
10th



Paris and New York Join Hands

in these two beautifully illustrated and most finished products of editorial effort and distinctive printing.

IN COMBINATION FOR A LIMITED TIME

COUNTRY LIFE IN AMERICA

Each Issue Contains

- ¶ The most perfect photographs that can be procured.
- ¶ Printing and half-tone work as fine as we know how to make it, with the most up-to-date equipment.
- ¶ Articles by writers who are famous for their appreciation of the beautiful in nature.
- ¶ Regular departments devoted to the automobile, the motor-boat, the camera, nature study, travel, horses, house-building, garden and grounds, poultry, real estate, aeronautics, with special numbers to cover every phase of country living.

Among the authors of special note who will contribute during the year are Alice M. Williamson, Ernest Thompson Seton, John Burroughs, Anne O'Hagan, Enos A. Mills, Jack London, etc.

**SPECIAL
OFFER:**

Annual Subscriptions to both magazines, \$7.00. If your subscription reaches us before November 10th, we will send you both magazines for a year for \$4.50; if before December 10th, both magazines for a year, \$5.00.

DRESS

The Magazine of Beauty, Authority
and Good Taste for Women

- ¶ The magazine of irresistible appeal to every woman who delights in beautiful gowning and who wishes to keep up with the interests of the fashionable and social world.
- ¶ Edited by American experts and with the unique distinction of having as Parisian contributing editors Poirét, Worth, Drécoll, Carlier, Lacroix, Laferrière, etc., the world's acknowledged masters of mode, whose contributions appear in Dress.

Among the celebrated contributors to Dress for November are: Carlier, Mrs. O. H. P. Belmont, Emily Post, Belle Beach, Euphemio Whittredge, etc.

GARDEN CITY

DOUBLEDAY, PAGE & COMPANY

NEW YORK



The Real Estate Department of House & Garden will be glad to advise its readers in regard
This service is given without charge. Address Real Estate

Greenwich Conn. from N.Y. 28 Miles

An unusual opportunity to purchase a modern and attractive all year round Country Home. The House contains 15 rooms (6 masters' and 4 maids' rooms, 4 baths). The grounds cover 3 acres, beautifully arranged with shade trees and shrubbery.

This property has never been offered before, having just been listed with us. Can be seen by appointment only.

**Shore Fronts — Farms
Acreage — Residences**

Furnished and Unfurnished
HOUSES by the Season or Year

Thomas N. Cooke

Real Estate Agency
Smith Building
Tel. 430 Greenwich, Conn.

GREENWICH, CONN.

FOR SALE FOR \$10,000

Five acres of land situated near Rock-ridge and a modern eight room bungalow with hot water heat, bath, electric light and all modern improvements, garage.

For further particulars apply to

LAURENCE TIMMONS

Opposite R. R. Station. Telephone 456

GREENWICH, -:- -:- CONN.

Princeton Homes

Perfectly appointed modern homes in charming surroundings. No manufacturing—Princeton is a purely home town. Equally distant from New York and Philadelphia—fast trains.

Rentals \$300 to \$6,000 a year. Furnished homes also for rent.

Choice properties—town and country—furnished or unfurnished, for sale or rent, in other desirable localities.

WALTER B. HOWE Princeton, N. J.
New York Office, 56 Cedar Street

Villa Sites

Overlooking the Town of Beverly
and Massachusetts Bay

But 25 minutes from Boston and only 5 from Beverly Station. 60 acres for sale in lots as the purchaser desires. A gradual slope to the splendid water front offers exceptional facilities for boating and salt-water bathing. Address

H. A. WYCKOFF

274 Clinton Avenue, BROOKLYN, N. Y.



ON SEPTEMBER 30th, 1911

we open for inspection and offer for sale to plots of ¼ acre and larger the valuable, high class, perfectly developed and unusually attractive "Waterfront Park,"

"Wampage Shores"

on Manhasset Bay, Sands Point, L. I. R. R. Station, Port Washington.

A very large expenditure of money, covering two years' work, has created ideal conditions for homesites with private beaches on this beautiful little Peninsula, which commands magnificent views and stretches far out in the most picturesque part of Manhasset Bay, in a section famous for its natural beauty, health and social attractions.

Wampage Shores, with one mile of beautiful beach, with no road or reservation in front, makes ownership possible at very reasonable price and on easy terms if desired, of a type of property heretofore only within the reach of the very wealthy.

Every possible feature is here combined to make a home attractive—Encroachment is impossible (Wampage Shore being a Peninsula). Restrictions protect residents against all nuisances. Water supply of the finest character is piped to every plot. Electric and telephone connections are in underground conduits—no poles or overhead wires are permitted. Roads are macadamized, side paths made and trees, shrubs and hedges planted.

A perfect Bathing Beach, Pavilion, Pier, Boathouse, Anchorage for large and small boats are provided and ownership in these essentials is given every purchaser.

Two model homes with garages are offered for sale.

Splendid Automobile Roads lead to New York and Port Washington.

Our launch at the Public Dock at Port Washington meets New York trains, leaving Penns. Terminal, N. Y., at 10:08 and 11:07 A. M., 1:00 and 2:15 P. M. Write for full particulars and visit Wampage Shores as our guest.

S. OSGOOD PELL & CO.,

Tel. 5610 Bryant

542 Fifth Ave., Cor. 45th St.

Property and Rent

to the purchase, sale or rental of country and suburban real estate in all parts of the country.
Department, House & Garden, 31 East 17th Street, New York City.



'Edgemont Estate' at Scarsdale Station
The ideal realization of out-of-town living. A delightful home community, for all-year residence. Protected social environment, the charm of the country, all city improvements. Immediately at station, only 19 miles on Harlem Elec. Div. N.Y. Cent. R.R. Special advantages to be secured for those building during the pre-let season.

Write for Booklet A

Scarsdale Company

J. Warren Thayer, Pres.
Scarsdale New York 503 Fifth Ave New York City.

HOMES AT SHORT HILLS

New Jersey's Most Exclusive Residence Section



Near Baltusrol Golf Club
and
Canoe Brook Country Club

Invigorating mountain air; broad outlook; pure, unfailing water supply; all city improvements; excellent express train service to New York. We build for your distinctive houses. Send for particulars.

ROCHE, CRAIG & WILEY,
Suite 1303—Phone, 1546 Cortlandt
165 BROADWAY, NEW YORK

"Twin Oaks Farm"

THIS beautiful Virginia Estate of about 180 acres, located within three miles of Warrenton, Fauquier County, Virginia, on a macadamized road, is offered for sale at a most attractive figure.

The residence, built of stone and frame, consists of 13 rooms and two baths. Lighted by acetylene gas, heated by furnace, is one of the handsomest residences in Virginia and most complete in all detail. It is situated on a hill commanding a superb view of the surrounding valley and mountains.

Complete coach house, poultry house, sanitary cow barn, hog houses, meat house, servants' quarters with bath, laundry, milk room, etc. Large farm barns and tenant houses.

The land is most fertile and well fenced, amply watered. This farm is just about as near a perfect country estate as can be found. No remodeling, no repairs necessary. Ready to move into and enjoy the delightful Virginia country life.

For full particulars, illustrated booklet, etc., write to

HARRY M. HUBBELL
Warrenton, Fauquier Co., Virginia

PHILIPSE MANOR



A Mile on the Hudson

Distinctive Features

Philipse Manor possesses many distinctive features which appeal exclusively to people of refinement and cultivation. This fact alone assures the future congeniality of this community.

Distinctive Location

Philipse Manor is situated at one of the most beautiful spots on the Hudson River. It is a part of that section designated as an "Enchanted Region" by Washington Irving in his "Legend of Sleepy Hollow."

Magnificent and inspiring river views can be enjoyed from every point on the property.

Distinctive Advantages

Philipse Manor is the only Development within 25 miles of Grand Central Station that possesses an actual unobstructed frontage on the Hudson River. This shore front includes a stretch of over a mile. It is, and always will be accessible to all residents of the development. This is a distinctive and decided advantage to persons who enjoy yachting, boating, bathing and fishing.

Philipse Manor is contiguous to numerous large and beautiful private estates. The renowned Sleepy Hollow Country Club, occupying the \$2,500,000 Elliott Shepard Mansion, is less than a mile away.

Distinctive Homes

Twenty-two strictly modern homes have just been completed at Philipse Manor. Designed by the country's leading architects, these homes are the embodiment of Comfort, Convenience and Tasteful Elegance. No better examples of House-Craft can be found in the world.

Write today for illustrated booklet and special 5% mortgage proposition. Address Dept. M.

Offices at
Philipse Manor
White Plains

Cooley & West Inc.
Telephone Murray Hill 4430
331 Madison Ave. N. Y.

Offices at
Mount Vernon
New Rochelle

We Finance Country Homes

We will build according to your own ideas, on specially selected property, in Westchester County, vicinity of Bronxville and Tuckahoe, and on North Shore of Long Island. Write for particulars.

The Debenture Corporation of New York
No. 334 Fifth Avenue New York City

FOR SALE: Beautiful Berkshire Farms and Estates. Lake fronts. Timber tracts; Hotels; Stores. Send for Booklet, it's free.

D. B. CORNELL CO.
Gt. Barrington, Mass.



KENNEL DEPARTMENT

The purpose of this department is to give advice to those interested in dogs. The manager will gladly answer any troublesome questions. Address "Kennel Department" and enclose a self-addressed envelope.



IRISH TERRIER PUPPIES

of both sexes. All from the very best stock.

For particulars address

CLOVERLY KENNELS

West Chester,

Penna.

"NICE DOG!" What Do You Feed Him?

Send for a free sample of Austin's Dog Bread with splendid dog book also free. Send grocer's name. 211 Marginal St., Chelsea, Mass.

Russian Wolfhounds

The Best Dog in the world and one of the Rarest Breeds extant. Peerless in beauty and reliability at disposition. Companions for gentlemen, ladies or children.

CATALOGUE "H"

Mirasol Kennels

Pasadena,

California



Pointers and Setters

WANTED TO TRAIN ON GAME. PLENTY GAME. TRAINED DOGS FOR SALE

W. GEORGE SMITH

K. 9 Kennels,

Marydel, Md.

HOME FOR PETS

Fall is here, and returning to town, send your Dog, Cat, Pony or Bird to us for the Winter. A REAL HOME. Terms reasonable.

VALLEY VIEW FARMS, Ballston Spa, N.Y.

An Assurance of Strength

There is a sense of security in having the best. It is often just the element a man needs to insure that confidence that begets success.

It is such a feeling that comes to a man when he detaches a

Peerless Patent Book Form Card

and sends it in to the man inside. He knows, while he waits, that he will be well judged because he has the best card.

This best card has smooth edges all around after being detached, and the book form and the case insures every card absolutely against dirt or injury.

It embodies every characteristic that could be wished for in a card, and eliminates the inconveniences of a loose card in your pocket or case. Besides there is an exhilaration in using and exhibiting it among your friends who invariably are attracted by its practical uniqueness.

Send today for a sample tab of the cards, and see for yourself that it is the best.

OUR SMART CARD IN CASE



STEEL COMPANY

PITTSBURGH, PA.

E. K. HARRIS

SALES AGENT

FISHER BUILDING

CHICAGO

The John B. Wiggins Company

Engravers Die Embossers Plate Printers

55-57 East Adams St.,

Chicago



AIREDALE TERRIERS

The best all 'round dog and companion. Our Terriers are blue ribbon winners at New York, Boston, Pittsburgh, Chicago, Kansas City and other large shows.

Puppies for Sale, \$25 and Up. Champion Red Raven at Stud, Fee \$20. The greatest living sire.

Beautiful illustrated booklet for stamp. ELMHURST FARM KENNELS, Sta. E., KANSAS CITY, MO.

TOY WHITE FRENCH POODLES, young and grown stock. Pedigreed. Prices reasonable. Also Toy Spitz Pomeranian pups. Write your wants.

MRS. G. C. RHODE, Ann Arbor, Mich.



YETSAN KENNELS

Tel. 34 Oyster Bay

OYSTER BAY, L. I.

Offer remaining dogs—Two grown King Charles by Cham. Young America, one Prince by Messenger Boy, one Beautiful Ruby dog and its dam. Brood Bitches. Reasonable to good homes and for pets.

YETSAN KENNELS Oyster Bay, L. I.

HANDSOME CATS AND KITTENS FOR SALE—



Domestic and rare foreign varieties. Siamese, Abyssinian, Manx, and Russian. Ideal boarding place for cats, dogs and birds. Model Poultry department, supplies broilers, fowl and squab.

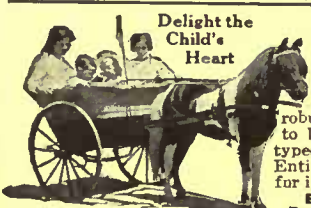
Write for beautifully illustrated catalogue and sales lists.

BLACK SHORT HAired CATTERY, Oradell, N. J.

PRIZE WINNING STOCK

English Toy Spaniels, Prince Charles, Rubys, Rhenheims From Prize Winning Stock. Low to close

WILLOUGHBY KENNELS, NORFOLK, VA.



Delight the Child's Heart

A Shetland Pony

—is an unceasing source of pleasure. A safe and ideal playmate. Makes the child strong and of robust health. Inexpensive to buy and keep. Highest types here. Complete outfits. Entire satisfaction. Write for illustrated catalog.

BELLE MEADE FARM, Dept. 3, Markham, Va.

POINTERS

"DON FASKALLY," 3 years old, one of the best bred, trained and hunting POINTERS in N. C. for sale owing to change in local game laws. Pedigree and particulars of the Secretary.

COUNTRY CLUB,

FLAT ROCK, NORTH CAROLINA

If You Have a Dog

You Should Read

FIELD AND FANCY

the only weekly in America devoted exclusively to the dog. Sample and Special Trial subscription Offer on application.

FIELD AND FANCY, 14 Church St., New York City

Ai-GEE PEKINGESE—ONLY A FEW LEFT



Property of R. H. Hunt, Esq., Port Chester, N. Y. Ai-Gee Todde, 17 mos., weight under 5 lbs.; 4 firsts, 4 specials, including Best Puppy, Best Parti-color Pekingese Show, 1911.

Mrs. A. Goodson, Hartsdale, N. Y.

Ai-GEE KENNELS

Phone, 1031 WHITE PLAINS

When You Buy Your Dog

WHAT A PEDIGREE MEANS

IT has become an essential requirement to most American purchasers of dogs that there be a pedigree. This is regarded as an absolute proof that the animal is perfect in most points and has a career of great note before him. As a matter of fact to the ordinary individual the pedigree will be of little significance. Not that he is apt to be hoaxed by a faked up or doctored genealogy, for the registered pedigree is passed on by the Kennel Club and cannot be forged and it takes but little knowledge to recognize the genuine article. But the different breeders specialize in certain points of conformation, and breed for certain definite characteristics which are not evident from the pedigree. In most cases the list means no more than a mere list of names. These are valuable for those that know what Champion Poor Pat or any other dog looked like, and the success he had in shows, but otherwise tell nothing. If you are seeking to start a kennel or to breed show dogs, lay most weight on the individual's record, always being sure that he is not past his usefulness or going off as a ribbon winner. The best way is to purchase a brood matron of established reputation and you start on a level with the man who has success in shows.

WHAT TO LOOK FOR

Most people, however, are not on the lookout for show dogs. They seek a good pet or house dog. One cannot give general advice here because of the varying types of breed. There are, however, several suggestions to help the purchaser. If you are buying a breed that is large and heavy at maturity, look for the biggest-boned best knit puppies. They are apt to develop well. The head conformation is of importance also. In connection with this it is well to remember that puppies' heads grow longer and thinner as they grow to maturity. As a lean face is characteristic of fewer of the breeds, see that your dog has a head well developed before the eyes. In breeds of erect ears, select with the smallest and neatest ears; they are most apt to grow up true to type. With the kinds that do not have erect ears, avoid pups with small ears for they are apt to stand erect later rather than droop or flop over. Always look for good health and absence of marks or blemishes.

WHERE TO BUY

The fallacy that dealers are cheats ought to be understood by now. Breeders of dogs for sale have an established reputation to uphold and cannot afford to resort to underhand practices. The Kennel Club has power, and uses it very quickly wherever evidence of dishonorable dealing is heard, so there is an added reason for honesty. In nearly all cases you can get the best advice and the fairest dealing with those whose trade is the rearing and selling of dogs.

A. W. D.



RICH woodwork graces the home as no other furnishing can. Inexpensive woods, such as Red Gum, Cypress and more ordinary grades, are enriched and dignified by the modern wood stains which distinguish and beautify the grain.

Johnson's Wood Dye

is specified by the better known architects, and insisted upon by well posted home-builders for its unequalled penetrating and finishing qualities, and for its rich, permanent colors.

Will you try Johnson's Wood Dye on a piece of wood-work or furniture in your home? Paint dealers everywhere are supplied with

Free Trial Samples

and will provide you with the color you wish. Also sample of Johnson's Under-Lac—better than shellac or varnish for a bright finish—or Johnson's Prepared Wax for a soft, dull finish over the Wood Dye.

If you will send us a post card, asking for Book HG11, we will mail, postpaid, an illustrated booklet which practical craftsmen everywhere recognize as an authority on finishing all woodwork, floors and furniture.

S. C. Johnson & Son, Racine, Wis.
"The Wood Finishing Authorities"

THORBURN'S BULBS

Largest and Finest assortment of high grade bulbs and roots in America.—Send for catalogue—mailed free

J. M. THORBURN & CO., 33 Barclay St., New York

BUFF ORPINGTONS

Are the Greatest Utility Breed

To make room for growing stock I will dispose of this year's breeders at very attractive prices.

Now is the time to arrange for your next season's Pens—I have quantities of exceptional chicks to choose from.

Stock and Eggs for Sale

JOE-PYE

South Norwalk, Conn.,
R. F. D. 37



"Champion New Yorker"
1st Prize Cock at
Madison Sq. and Boston
1911

The "Joe-Pye Book," 20
pages illustrated, sent
on request

Raising a Few Squabs

IT is quite possible for any man or woman with only a little land to raise enough squabs for home consumption, and even to swell the family income. Elaborate or expensive buildings are not needed. Many a successful breeder has kept his first birds in a barn or shed. Even when one purposes to go into the business in a commercial way, it is wise to begin with a few birds and increase his stock as he becomes familiar with the details of the work and develops his market. Many a squab-raising venture has failed because it has been undertaken on too large a scale at first.

Common pigeons do not give satisfactory results and it is a fatal mistake to begin with them. The most popular breed among squab raisers is the Homer. Pigeons of this breed are large, quiet, industrious and reliable. Of late, Carneau pigeons have won considerable favor, but are not abundant as yet. If the amateur begins with straight Homers he will not make a mistake.

The all-important matter is to buy mated pairs. Failure to observe this point has resulted in the wreck of many squab-rearing enterprises. Pigeons are not polygamous. They live in pairs, the same birds often remaining together for years. In a successful pigeon loft, every bird must have its mate. An odd bird or two flying about and interfering with the domestic affairs of the mated birds may cause endless confusion and trouble. In order to make sure of obtaining mated birds, it is necessary to buy one's foundation stock of a dealer or breeder who is thoroughly reliable, for it is practically impossible for the novice to distinguish between the sexes. It is well for him to have two small wooden cages with only a single partition of upright bars between them. When he is not sure that a pair of birds received from a distance are mated, he may put one in each pen. If, a few days later, he finds them billing and cooing, and kissing through the bars, he may feel safe in putting them with his working birds.

The pigeons on a squab plant must not have their liberty. The house where they are confined should have several windows on the sunny side and a pen to contain thirty pairs of birds should be about 10 x 16 feet. It is better not to keep the pigeons in larger flocks than thirty to a pen. Where there are several hundred birds, a long house is built and divided into pens of the proper size. Outside the house should be a covered yard or "fly" constructed of poultry wire, larger than the interior pen, if possible, and as high as the roof of the house. Such a fly gives the birds opportunity for outdoor exercise and causes them to be more contented.

A pair of pigeons will produce from four to ten pairs of squabs each year. If five or six pairs of squabs are secured from each pair of working birds, the owner should feel reasonably satisfied.

Fresh Air Heating and Ventilating



Kelsey Heated Ardmore, Pa.
Bunting and Shrigley, Philadelphia Architects.

Let Us Send You Our New Booklets

so that you may know why 40,000 home owners who investigated and wanted good ventilation and economical heating installed

KELSEY WARM AIR GENERATORS

For houses of any size from 5 to 75 rooms, Kelsey heating is worthy of your careful consideration.

KELSEY HEATING CO.,

Main Office: 66 E. FAYETTE ST., SYRACUSE, N. Y.
New York Office: 154c. Fifth Ave.



GIANT HIMALAYA BERRY

Vine hardy as an oak; stands winters anywhere. Bears enormous crops of rich, black berries—ten tons have been picked from 390 plants. Berries big, sweet, melting, delicious, 10 cents each; \$1 a dozen; \$3 a hundred; \$25 a thousand. Add 10 per cent. when wanted by mail. Send for *Berrydale Berry Book*. Tells about other profitable berries for home or market use.

Berrydale Experiment Gardens
House Avenue Holland, Mich.



SHEEP MANURE

Dried and pulverized. No waste and no weeds. Best fertilizer for lawns, gardens, trees, shrubs, vegetables and fruit.

Large barrel, freight prepaid East of Missouri River, Cash with order. Write for interesting booklet and quantity prices.

THE PULVERIZED MANURE CO.
25 Union Stock Yards, Chicago

Write a Postal Today Save Money All Winter

Let the fire that heats your house also heat your water supply

Write for our descriptive circular showing how the Tyler Domestic Hot Water Generator will economically and continually supply a large volume of hot water for the Kitchen, Bathroom and Laundry.

Fits any Hot Water, Steam or Hot Air Heater

Price \$6.00

TYLER Hot Water Generator

When writing tell us the name of the heating contractor or the man who sells furnaces in your locality. Write today to

F. A. TYLER,

36 Beaver St., Albany, N. Y.





POULTRY DEPARTMENT

The purpose of this department is to give advice to those interested in poultry. The manager will gladly answer any troublesome questions. Address "Poultry Department" and enclose a self-addressed envelope.



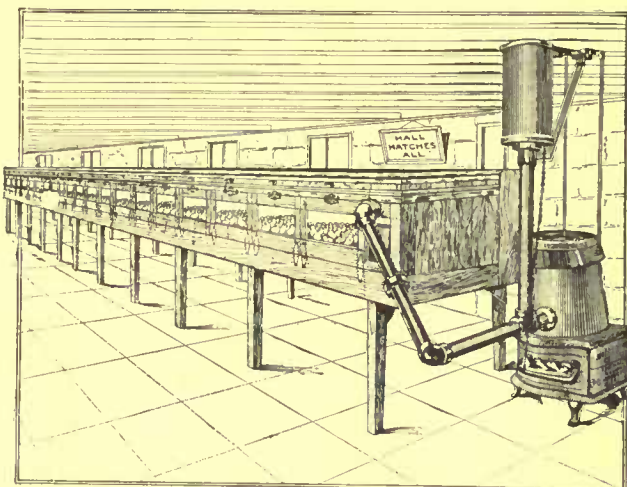
MORE CHICKS ——— BETTER CHICKS AND FOR LESS MONEY

THE HALL MAMMOTH INCUBATORS hatch a larger per cent. of chicks, stronger, healthier chicks, and at less cost per chick than any other system of artificial incubation.

They embody the laws of nature so perfectly that every essential to a maximum per cent. of hatch is correctly supplied. Heat, moisture, and air are furnished equally as well as nature does. This fact accounts for the vigor of the chicks when they come out of the shell. The temperature has always been just right. The moisture condition has also been properly maintained at all times, and the air has been pure—oxygen laden. These three essentials are under absolute control.

Our free catalog "Fact and Argument" tells about artificial incubation and upon what we base our assertion—"Hall Mammoth Excels All."

Send for it today.



The Hall Mammoth Incubator Co., Utica, N. Y.

Two eggs are laid before the mother bird sits on them. The nests in a well-conducted pigeon house are placed along the inside wall in tiers, and should be about two and a half feet long, allowing space for two earthen or wooden "nappies," one at each end, with a low division board a few inches high between them. Tobacco stems cut into short lengths are used in the nests to line them and to aid in keeping away lice. A spray of hot, soapy water to which a pint of kerosene has been added to each pail is another cheap and effective insecticide.

After one pair of squabs has been hatched, the mother bird moves to the adjoining nest and lays two more eggs, this arrangement being continued indefinitely. The father bird helps in the care of the squabs, which are fed at first on what is termed pigeon's milk. The grain swallowed by the parent bird is transformed into a thick, milky substance, which is gulped up and into the open beak of the squab. This nursing is continued for some time before the parent birds venture to carry grain which has not been pre-digested to their nestlings.

Pigeons thrive on a variety of grain, including red wheat, corn, Kaffir corn, millet, buckwheat and hemp seed. The latter is fed sparingly, occupying about the same place in the dietary of a pigeon as candy in that of the small boy. Good red wheat is considered the staple ration, but variety is necessary if the birds are to be kept in good condition. In addition to grain, breeding pigeons must have a liberal supply of salt, oyster shells, grit and charcoal, these articles usually being kept in the pen where they can have access to them at all times. The salt is best prepared by wetting it and baking it hard. The other things may be secured at a feed store.

Water is necessary both for drinking and bathing purposes. Pigeons do not dust in the sand as do poultry, and so may become badly infested with lice unless permitted to bathe freely. A shallow bathtub filled with fresh water should be placed in each pen every day during the summer and once or twice a week during the winter months. In some places it is possible to secure running water, in which case the amount of work required is reduced materially.

Probably the best prices for squabs are to be obtained from hotels, clubs and private families. The boy or girl who embarks in the business may prefer to sell them alive to a dealer, in order to avoid the work of killing and dressing them. In many places it is possible to hire a man to perform this rather disagreeable work. If the squabs are plump and white, nicely dressed and attractively wrapped, they usually sell very readily and it is not difficult to secure regular customers, who will agree to take a fixed number each week. The secret of success lies in beginning in a small way and increasing the number of breeders as experience is gained.

E. I. F.



ONE OF THE SIGHTS IN OUR PARK

We carry the largest stock in America of ornamental birds and animals. Nearly 60 acres of land entirely devoted to our business.

Beautiful Swans, Fancy Pheasants, Peafowl, Cranes, Storks, Flamingoes, Ostriches, Ornamental Ducks and Geese, etc., for private parks and fanciers. Also Hungarian Partridges, Pheasants, Quail, Wild Ducks and Geese, Deer, Rabbits, etc., for stocking preserves. Good healthy stock at right prices.

Write us what you want.

WENZ & MACKENSEN

Proprietors of Pennsylvania Pheasantry and Game Park

Dept. "H. G." Bucks County, Yardly, Pa.

DON'T BUILD!

A \$25.00 House.



6x6-foot Portable House equipped with 4-ft., 2-perch Potter Hennerly Outfit for 15 hens. Complete with floor, etc.,

or fix up your hen-house until you get our two large catalogs (132 pages, over 150 illustrations), showing POTTER PORTABLE POULTRY HOUSES and fixtures in all styles and sizes.

FOR TEN YEARS

we have been making these goods. They are tried and tested and used by thousands of poultry keepers.

YOU CANNOT AFFORD

to be without POTTER-made goods. They'll give satisfaction and save you time, labor and worry in your poultry work. Made for a purpose, and made right. Our catalogs mailed promptly for 2 red stamps to cover postage. Write to-day and learn about Potter Poultry Products for particular poultry people.

POTTER & CO., Box 77, Downer's Grove, Illinois

Baby Chicks of Quality

SENT BY EXPRESS DIRECT TO YOU

Why bother with eggs? I can supply you with healthy young chicks at once and guarantee them to reach you in good condition. Fishel Strain White Plymouth Rocks, S. C. R. I. Reds and other breeds. Prices reasonable. Chick catalogue free.

R. C. Caldwell, Box 1030, Lyndon, Ross Co., Ohio

The Poultry Department

Is always ready to help with their advice any who may be confronted with poultry problems, whatever they may be—diseases, show points, hatching, raising, anything relating to poultry—the Department is glad to assist you in any way. Send your inquiries with a stamped envelope to the

Manager Poultry Department
House & Garden

Are You 'Satisfied with Your Income?



Would \$500, or more, a year on the side be an object to you?

You can easily make and exceed that amount in the poultry business without interfering with your regular work. Consumption of poultry products is fast overtaking production.

The producers can not keep abreast with the needs of the increasing population. Now a billion dollars are spent annually for poultry and eggs. Why don't you get a part of that enormous sum? You can, if you will.

"Side-Line Poultry Keeping"

\$1,188.05 is the amount F. H. Dunlap, of West Salisbury, N. H., cleared from his hens in 1910, and did not devote more than two hours a day to them. You can learn the secrets of his success in the book, "Side-Line Poultry Keeping."

\$1,009.31 was the net profit made by R. A. Richardson, Haverhill, Mass., in 1910, who attended to his regular work as a shoe cutter. The details of his success are also told in "Side-Line Poultry Keeping."

THIS RELIABLE BOOK

is by Edgar Warren, who writes in such a simple, pleasing manner that any novice can understand and follow the instructions which lead eventually to success. It is of special value to the person who desires to add several hundred dollars to his annual income without interfering with his regular work. It covers every detail of the hen business and its allied interests—hatching, brooding, selecting layers, feeding for growth and fertile eggs, dressing, shipping, selling, treatment for internal and external ailments, "Laying Down Eggs" for perfect keeping, etc., etc.

Special Offer: Price, 50 cents, or book and two years' subscription for \$1.00, or premium for two yearly subscriptions at 50 cents each. Our paper is handsomely illustrated, 44 to 120 pages, 50 cents a year. Three months, 10 cents. Sample free. Poultry book catalog free.

AMERICAN POULTRY ADVOCATE
200 Hodgkins Building, Syracuse, N. Y.

Maplecroft Rhode Island Reds

win at all the leading shows. "It pays to buy the best." Stock and Eggs for sale in large quantities. Send for Circular and Mating List of S. C. Reds. J. G. Dutcher, Prop. Address Maplecroft Farms, Pawling, New York



White Orpingtons

They lay like slot machines. My birds have won at Madison Square, Pittsburg, Cleveland, Buffalo, Chicago and other large shows. New catalog free.

Lawrence Jackson

Haysville, Allegheny Co., Pa.



RABBITS AND PET STOCK

Unrivalled Flemish Giant, Angora, Tan and Polish Rabbits—Peruvian and Smooth Cavies for fancy or pets. Some Good Youngsters now for sale, \$1.00 up

ELM COVE RABBITRY, Great Neck, L. I.

G. D. TILLEY

Naturalist

Rare Land and Water Birds

Swans, Geese, Ducks, Peafowl, Cranes, Pheasants, etc. I am the oldest established and largest exclusive dealer in ornamental birds in America.

G. D. TILLEY, Naturalist
DARIEN, CONNECTICUT



A CHOICE OF PLEASURE TRIPS For Your Winter Vacation

THREE
YACHTING CRUISES
REPEATING PREVIOUS UNPRECEDENTED SUCCESSES
TO THE

Exquisite
WEST INDIES, SOUTH AMERICA
AND PANAMA CANAL

BY THE AMERICAN LINE'S

Twin Screw S.S. "NEW YORK" 10,800 Tons

LONG VOYAGES JAN. 20 and
31 Days Each FEB. 24

\$150 Upward

EASTER SHORT CRUISE, MARCH 30
18 Days—\$85 end Upward

CUBA—JAMAICA—ST. THOMAS
RORTO RICO—BERMUDA

Ask for Programs and Details

PLEASURE CRUISE DEPT.

Offices and Agencies Every where

9 BROADWAY
NEW YORK

WINTER
VOYAGES DE LUXE
TO THE

Superb
MEDITERRANEAN

BY THE WHITE STAR LINE'S

Memmoth Twin Screw S.S. "ADRIATIC"
AND "CRETIC"

The Largest British Mediterranean Steamers

SAILING FROM NEW YORK

DEC. 2—JAN. 10—JAN. 24
FEB. 21—MAR. 6

Also Regular Sailings from New York and Boston to
ITALY by the Twin-Screw Steamships

"Cretic," "Canopic" and "Romanic"

Illustrated Booklets and Complete Itineraries

WHITE STAR LINE,

Offices and Agencies Every where

9 BROADWAY
NEW YORK

ADVICE

REAL ESTATE

ASSISTANCE

Information will be gladly given to readers who are looking for desirable country or suburban homes, farms or acreage in any part of the country.

Owners, brokers and development companies can bring their property to the attention of thousands of home-loving people through this department.

Let us quote you our special rates.

MANAGER REAL ESTATE DEPT., HOUSE & GARDEN

449 FOURTH AVENUE

--

--

NEW YORK



Important to Those Who Expect to Build

WHEN PLANNING TO BUILD, you will find it of great value to first make a careful personal study of the illustrations of houses, etc., that have been designed and built by a number of leading architects, and to also learn their ideas regarding the best interior arrangement and the most appropriate furnishings.

This important information, which would greatly aid you in deciding about your own building plans, when you take them up with your own architect and builder, can easily be obtained from the several hundred exterior and interior designs that are beautifully illustrated in the last six numbers of the

Architectural Record

The National Magazine for Architects, Owners and Builders
A Powerful Business-Producer for those firms whose products are used in building-construction or equipment.

Guaranteed circulation exceeds 10,000 monthly.

In these six numbers are also illustrated and described the numerous building-specialties that add very much to the comfort, convenience and value of the modern home, without materially increasing the initial cost; and this information may mean the saving of many dollars to you.

OUR SPECIAL OFFER

We have a limited supply of these sets of six numbers, which are invaluable to those who expect to build or make alterations. Although the regular price is \$1.50, we make you a special offer of \$1.00 for the six, while the sets last, if you will mention HOUSE AND GARDEN. They will soon be sold. Send us your order today; tomorrow may be too late.

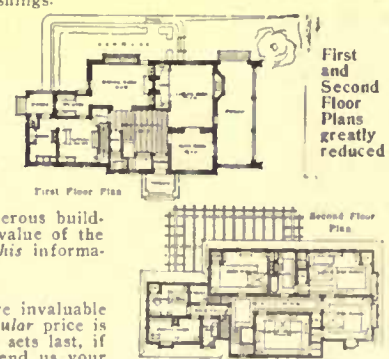
THIS \$1.00 SHOULD SAVE YOU HUNDREDS

THE ARCHITECTURAL RECORD, 197 Metropolitan Annex, New York City.

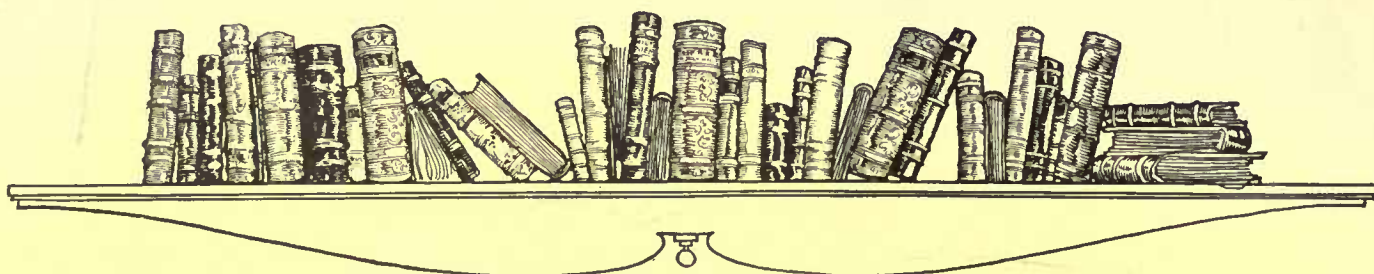
Enclosed is \$1.00, for which please mail your last six numbers (including the October COUNTRY HOUSE NUMBER), according to special offer in HOUSE AND GARDEN.

Name

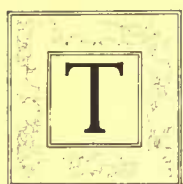
Address



First and Second Floor Plans greatly reduced



FROM THE PUBLISHERS' DESK



THE CONTINUED growth of our business and the enlargement of our activities have again necessitated our removal to larger offices. We are now at 31 East 17th St., overlooking Union Square, where we have quarters that have been arranged especially to take care of a business such as ours.

These offices are not new to magazine publishing. It was here that Everybody's Magazine was issued from the time it emerged from comparative obscurity into the limelight of public notice through the appearance of the Lawson articles on "Frenzied Finance" that set the financial world agog, aroused an enormous public interest in high finance, and started an era of so-called "muck raking" that has only recently seemed to subside. This periodical, merging with another organization, moved to a new building and made it possible for us to move into a workroom that had been arranged conveniently for exactly our business. We have the entire eleventh floor of the building, extending through from 17th to 18th streets. From our windows, with Union Square in the foreground, we can look off to the southeast and see the Brooklyn and Williamsburg bridges spanning the East River to Brooklyn; to the south the high ground of Staten Island is clearly in view, with the Statue of Liberty in the foreground, and to the west the Hudson River appears only a short distance away. It is remarkable how rapidly the different centres of New York have shifted and are shifting. On the other side of Union Square is 14th Street, that was originally a part of old Greenwich village, a tiny place far distant from the city of New York in Colonial times. Sixty years ago this was the centre of the finest residential section of the city. Twenty-five years ago 14th Street was the axis of the retail centre of New York, all the big stores being located on or near there. Fourteenth Street's ancient glory as a shopping district has long since departed, for the stores have been rapidly going uptown, first to 23rd, then to 34th, and many of the finer shops are creeping northward on Fifth Avenue as far as 50th Street. The Union Square district has grown into an important wholesale section.

Our New Magazine

We were cramped in our old quarters in publishing *House & Garden* and *Travel*, and we needed more space to properly care for our business, but it was the advent of an addition to our periodical family that actually confronted us with the necessity of securing more room or being crowded into the street. We

decided not long ago that there was a place for a quarterly periodical devoted to things nautical and marine, the result being that we announce the appearance on December 1st of the first issue of *The Boat Buyer*. It will be a magazine of value to the man who wants help in the selection of a boat, whether sail or motor, and in the equipment thereof.

Yachtsmen are like horsemen—they are always swapping their property. We shall aim to publish also in *The Boat Buyer* the best in sail and motor boats for sale and charter. We think that the average man buys his marine periodical for help in the selection and purchase of his boat and equipment rather than for anything else. *The Boat Buyer* will be published to satisfy this need. Send 50c in stamps, silver or any other way and receive *The Boat Buyer* for a year. As we have said, it will be issued quarterly—perhaps more often if it seems necessary.

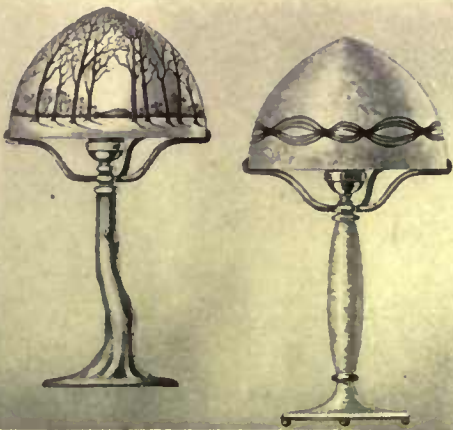
A New Book of Travel

One of the most intensely interesting travel books that we have had the pleasure of reading is Dr. Leary's "The Real Palestine of To-Day," which we publish this month. Many books of travel are dry and dull, and it is hard for us to convey to you through the medium of cold type what a splendid book this is—teeming with human interest. Take our word for it, and get a copy. If you decide we're wrong, you may return the book, and we will cheerfully send back the money. The price is \$1.00 (postage, 8c).

Speaking of travel literature, have you ever seen a copy of our other magazine, *Travel*? One of our readers wrote us not long ago a letter which says:

"I cannot compliment you enough on your beautiful *TRAVEL*. I am a heavy subscriber to magazines and weeklies, and am in a position to judge the merits of *TRAVEL*. I think I am safe in asserting that *TRAVEL* ranks among the first, if not *THE* first. Quality of paper, superb photogravures, high-class descriptive reading—combine to make *TRAVEL* a most delightful guest in the home. I consider *TRAVEL* too exquisite to dispose of and it eloquently suggests binding into volumes. I assure you it is a treat to one who, like myself, is the almost daily recipient of magazines, weeklies, etc. You should have a tremendous sale."

This seems to be the way our readers in general regard *Travel*. We believe you, too, would find it a welcome visitor to your library table. If you are not acquainted with *Travel*, we shall count it a pleasure to mail you a copy with our compliments.



Are you satisfied with your home lighting?

Handel Lamps and Lighting Fixtures furnish splendid illumination for every purpose.

Handel Lamps

For Desk or Boudoir

The lamps pictured here are typical of the many artistic desk or boudoir lamps bearing the Handel name. Their dainty size (about fifteen inches high), their delicate coloring and graceful construction render them admirably suited for the boudoir or desk.

They make very acceptable Christmas gifts. Put them on your list now.

The Handel productions comprise many styles of lamps and lighting fixtures for electricity, gas or oil. They are sold by leading jewelers and lighting fixture dealers. Look for the name "Handel" on every lamp.

Our booklet, "Suggestions for Good Lighting," sent upon request

THE HANDEL COMPANY

390 East Main Street, Meriden, Conn.
New York Showrooms, 64 Murray Street



SUGGESTION FOR BREAKFAST ROOM

Home Comfort Combined with Refinement

in Interior Decorations and Furnishings characterize the Decorative Schemes shown in Special Rooms at the Studios, where those interested may see Furniture, Fixtures, Hangings and Floor Coverings which will prove of interest in settling the problem of House Decorations.

An opportunity to consult those requiring assistance along these lines is solicited and pamphlets of our various departments will be mailed upon request.

DISTINCTIVE WORK

REASONABLE PRICES

 **TIFFANY**  **STUDIOS** 
347-355 MADISON AVE. COR. 45TH ST., NEW YORK CITY.
CHICAGO OFFICE. ORCHESTRA BVLIDING - BOSTON OFFICE. TREMONT BVLIDING.



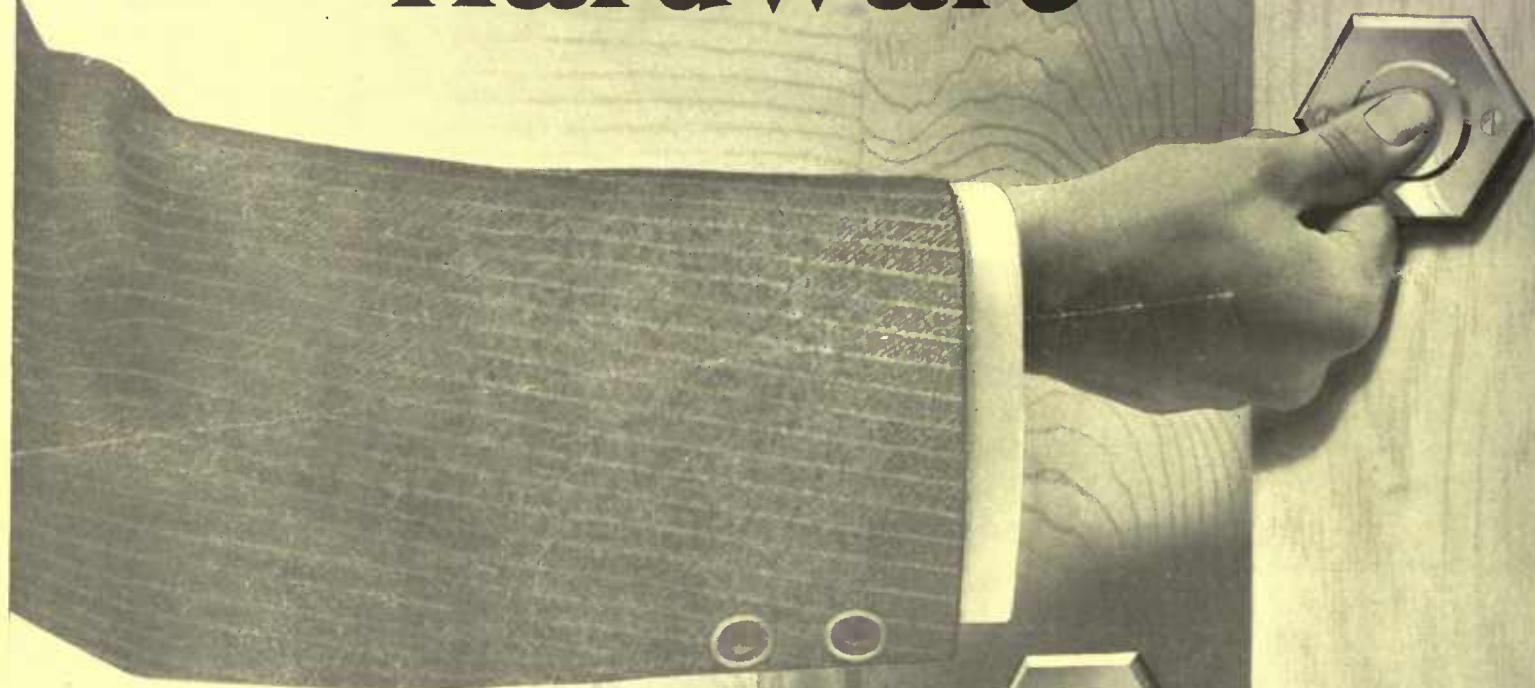
INEXPENSIVE HOMES OF INDIVIDUALITY DE LUXE EDITION

This little book of 64 pages contains 108 illustrations and floor plans of the best houses of moderate size built to-day. "Inexpensive Homes of Individuality" offers an exceptional opportunity of studying in detail some of the best designed smaller houses of various architectural types the country over, ranging in cost from two to eight thousand dollars. It is printed on the best stock, with a rich binding of green and gold, superbly illustrated, and contains an introduction on the "Choice of a Style for the Country or Suburban Home," by Frank Miles Day, Past President of the American Institute of Architects. It is a lasting source of inspiration and suggestion. Price, 75 cents postpaid.

McBRIDE, NAST & CO., Publishers, 449 Fourth Avenue, New York

SARGENT

Hardware



ON approaching a house, you have an impression of either harmony or discord. If the architecture is pleasing and the entrance door with its hardware trimmings in accord, the entire effect is prepossessing.

The architect analyzes the cause of such impressions. He knows that inharmonious hardware at the focal point—the entrance door—can greatly mar an otherwise handsome building.

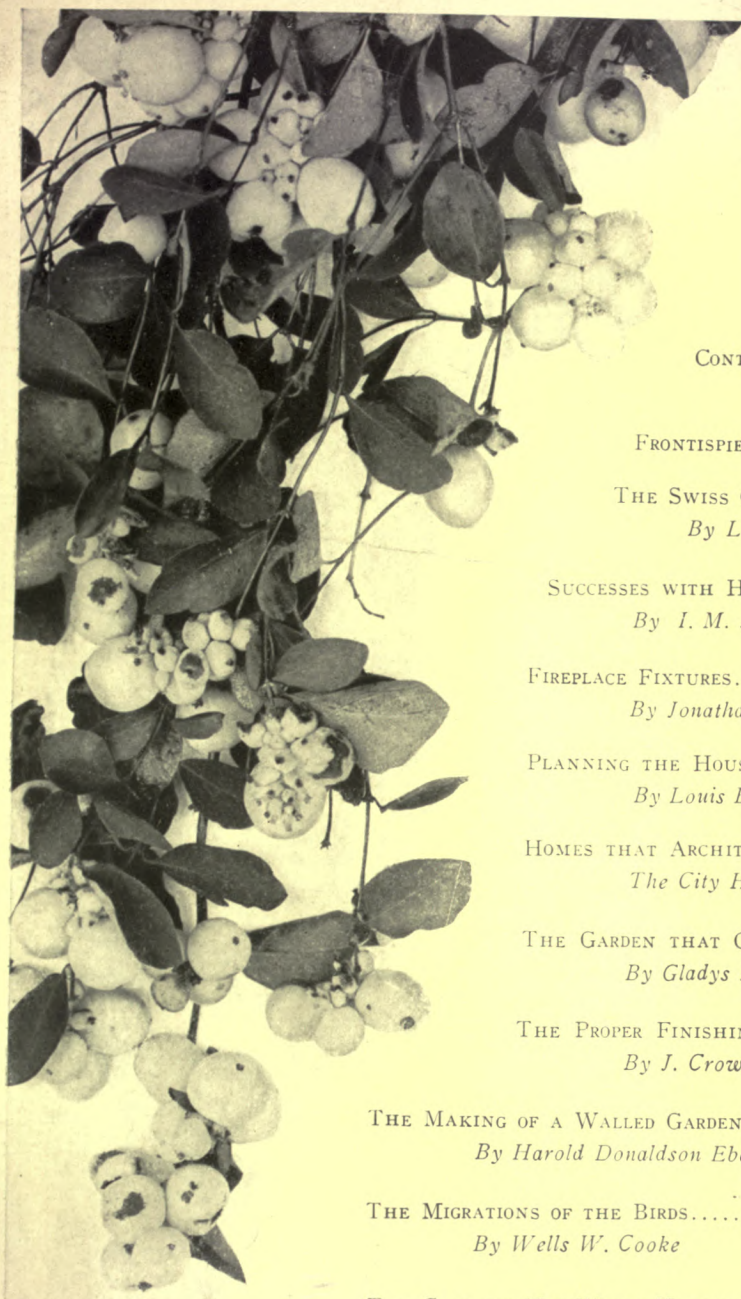
That is why so many experienced architects advise their clients to select designs in Sargent Hardware. Sargent designs include so many different examples in each school and period of architecture that there is wide latitude for personal preference without danger of missing the essential harmony.

Sargent Book of Designs—mailed free

This handsome book, illustrating many of the designs most favored for homes is mailed free on request. Our Colonial Book will be included to anyone who mentions an interest in that period.



Sargent Locks are typical of the solid worth and substantial character of Sargent Hardware. Among lock experts they are famed for the security they afford. Sargent Door Locks and lock systems may be had for every locking purpose under the sun.



CONTENTS

NOVEMBER

• 1911 •

CONTENTS DESIGN: SNOWBERRIES

Photograph by Nathan R. Graves

FRONTISPIECE: THE MODERN SWISS CHALET

THE SWISS CHALET TYPE FOR AMERICA..... 289
By Louis J. Stellman

SUCCESSES WITH HOUSE PLANTS—A SYMPOSIUM..... 293
By I. M. Angell, Ida D. Bennett, Edna Coulter, Luke J. Doogue, C. L. Meller

FIREPLACE FIXTURES..... 296
By Jonathan A. Ratson, Jr.

PLANNING THE HOUSE AND THE GARDEN TOGETHER..... 298
By Louis Boynton

HOMES THAT ARCHITECTS HAVE BUILT FOR THEMSELVES—II..... 301
The City Home of Stowe Phelps, architect

THE GARDEN THAT CAME..... 304
By Gladys Hyatt Sinclair

THE PROPER FINISHING OF HARD WOOD FLOORS..... 306
By J. Crow Taylor

THE MAKING OF A WALLED GARDEN..... 308
By Harold Donaldson Eberlein

THE MIGRATIONS OF THE BIRDS..... 311
By Wells W. Cooke

THE CASE FOR HOT-WATER HEATING..... 314
By James A. Harding

A GARDEN IN THE ADIRONDACK FOOTHILLS..... 316
By Mary Llewellyn Gibson

THE HOME OF R. S. MACNAMEE, Berwin, Pa..... 317
David Knickerbacker Boyd, architect

THE HOME OF C. H. BUSH, Cranford, N. J..... 318
Hollingsworth & Bragdon, architects

THE REMODELED HOME OF STANLEY J. LATHROP, Wyoming, N. J..... 319
Howell & Thomas, architects

INSIDE THE HOUSE..... 320
Little Pitchers for Bedrooms
A New Candle Lantern

GARDEN SUGGESTIONS AND QUERIES..... 322
The Whole Story of Plants Within Doors
Keeping Geraniums Over the Winter
The Last Duties in the Garden

EDITORIAL 324
Cosmos After Frost
Raising Squabs on a Small Scale
Brickwork
Care of Palms
Buying the Dog

VOLUME XX NUMBER 5

Copyright, 1911, by McBride, Nast & Co.

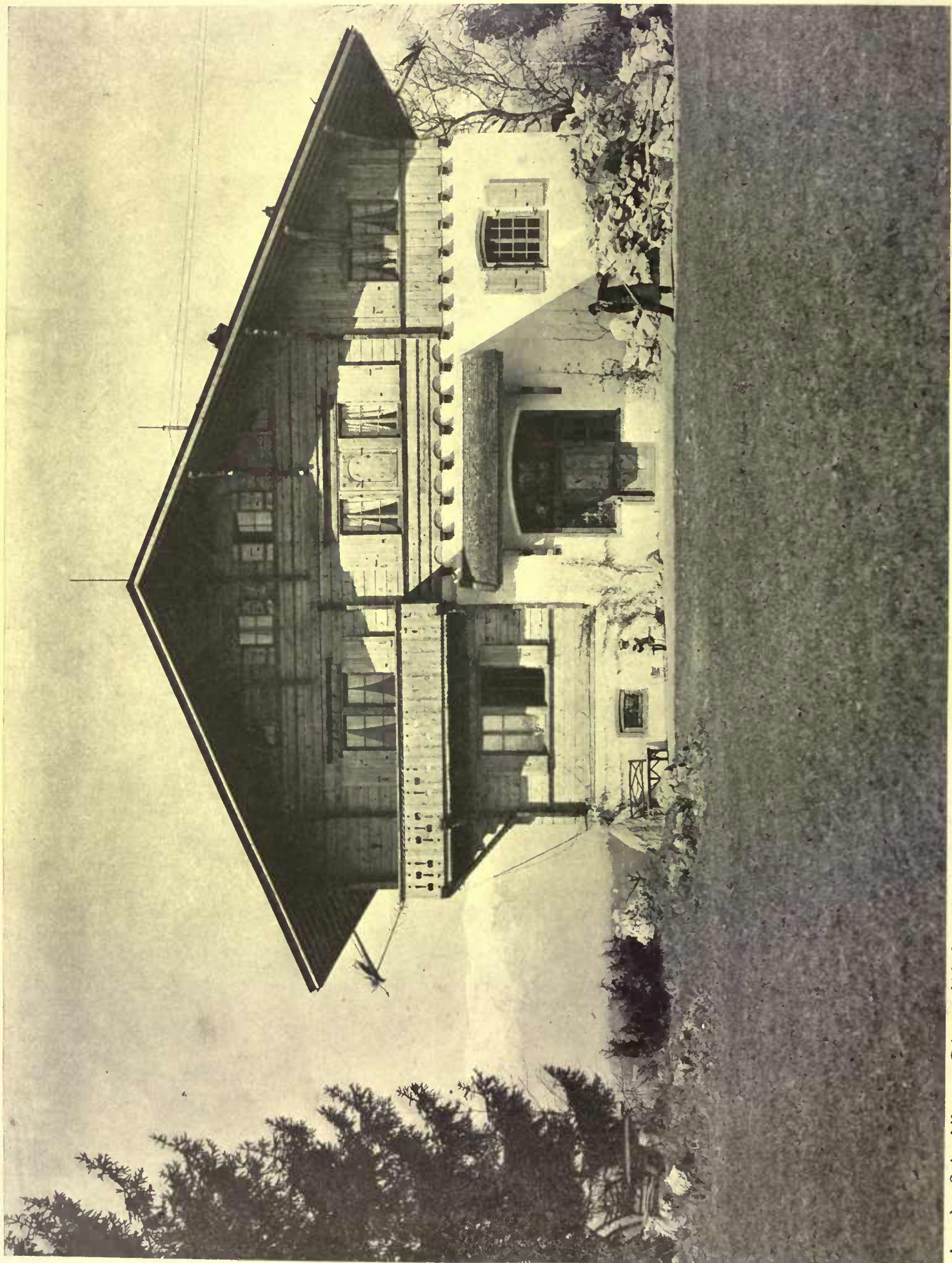
HENRY H. SAYLOR, EDITOR

McBRIDE, NAST & CO.

31 EAST 17th STREET, UNION SQUARE NORTH

NEW YORK CITY

Robert M. McBride, President; Condé Nast, Vice-President; Robert F. MacClelland, Secretary; Henry H. Saylor, Treasurer. Published Monthly. 25 cents per Copy. \$3.00 per Year. For Foreign Postage, add \$1.00; Canadian, 50c. Entered as Second-class matter at the Postoffice, New York, N. Y.



A modern Swiss chalet near Grisons, which shows the recent use of stone and concrete in connection with wood. Such types as this are well adapted to our western country, and seem peculiarly fitted for the outdoor life of the dwellers along the Pacific coast. There it is another example of the house which may be built to fit the surroundings



House & Garden



VOLUME XX

November, 1911

NUMBER 5



It is interesting to compare this American adaptation of the Swiss chalet with a modern Swiss prototype on the opposite page. The roof lines and the sawed-wood porch rail are almost identical. Here battens, making perpendicular lines, are used instead of the horizontal boards of Swiss construction. Myron Hunt and Elmer Grey, architects

The Swiss Chalet Type for America

BY LOUIS J. STELLMANN

Photographs by the author and others

[The problem of choosing an architectural style for the American country or suburban home is one of the most puzzling that confront the home-builder. In order to bring about a better understanding of the more common types and with the idea of clarifying, as far as possible, this whole matter, we have asked a number of prominent architects to present each the case for one particular style. In previous issues the characteristic features of the Colonial, Dutch Colonial, Half-timber, English Plaster and Chicago School of Architecture were developed and illustrated at length by prominent architects interested in each of these types. There remain two or three of the more common styles which will be taken up in future issues.—EDITOR.]

ANY type of architecture which has a genuine appeal to the public, must appeal to the heart as well as to the mind. I have heard it said that the appeal of architecture is through a combination of memory and symbolism; that is, it either reminds one of something one has seen or it stands for the traditions which the advancement of civilization has developed.

If one accepts this, architecture is removed from the sordidness of mere practicality and the commonplacery of pure expediency.

A structure must be both wholesome and attractive; it must serve our needs well and, at the same time, remind us of something pleasant. In short the ideal house must simultaneously protect the body and uplift the mind.

Perhaps this may seem unnecessarily long a prologue for an appreciation of the Swiss chalet style in American architecture, but it is because this style satisfies so peculiarly my demands in the above connection, that I have gone to some pains in order to



A Swiss mountain chalet, which has features evident in the two American adaptations below it. The dovetailing of the timbers at the corners is noteworthy

make them clear enough to serve as a working hypothesis.

There is about the Swiss chalet a rugged, honest picturesqueness, a simple, candid strength that I find in no other type of habitation. Because of this impression, I mention the sentimental consideration first. It seems to typify—as plainly as a house can ever hope to represent a man—the hardy, fearless, simple moun-

taineer—whose life is spent among the heights and broad vistas and who lives a simple frugal, happy, sincere life.

It is too much to suppose that the Swiss chalet will become extremely popular outside of its Alpine home. There is too much complexity in the vastly predominant and populous lowlands to give it great vogue, too much tendency to improve on nature instead of co-operate with it, to scatter Swiss chalets through the land. And yet, in America, especially along the Western coast, the Swiss chalet is becoming more and more observed.

Probably there is no place outside of its native land where the Swiss chalet may be more advantageously used than along the Pacific coast hills, particularly those around San Francisco Bay, where many interesting examples are to be found.

Of course there is little snow in Cal-



The Reese house, in Berkeley, Cal., was built from a model executed in Switzerland. The timber ends and balconies show a similar construction to those in the picture above. Maybeck & White, architects



This picturesque house shows how American ideas in plaster and timber may be applied to the chalet type. The enclosed balcony is an elaboration of the little balcony in the Swiss chalet above. L. C. Mullgardt, architect

ifornia except in the extreme northern portions. This brings us to a consideration of the fact that climate alone did not produce the Swiss chalet. Perhaps, indirectly, it did, after all, for the Swiss mountaineer is the product of the invigorating climate which the Alps provide. But, out of his rugged, honest, sham-hating, art-loving heart and brain has come that picturesque style of habitation which is as nearly distinctive as architecture may be. His love of out-door life produced the broad veranda, (forerunner, undoubtedly of the modern winter-and-summer-sleeping-porch), the wide eaves to protect this veranda and the court below, where he sat of an evening with his pipe. He courted the open at all times possible, this old Tyrolese, and the Californian is in agreement with him, as far as that goes.

But, more than all else, the Swiss chalet co-operates with nature. How many times does one see a house that seems a part

of its general surroundings? Usually the surroundings are fitted to the house with the inevitable result that an incongruity, more or less blatant, is produced.

Man cannot hope to compete with God as a landscape gardener or architect. The Swiss mountaineer felt this, even if he did not



A little chalet near Berne, which shows features adopted by builders of the type in America

know it. He made no attempt to terrace the eternal hills, to create false and artificial plateaus upon which to build a conventional dwelling. He made a partner of Nature and worked to their mutual advantage. Out of it came an architecture which, if primitive, was big, harmonious and wholesome to a wonderful degree.

The original Swiss chalet does not seem to have been built against a hillside. Apparently it was a crude log cabin, not unlike the huts of our pioneer ancestors, erected by Alpine cowherds for more or less temporary shelter. It differed from the American log cabin in the mortising or notching of the log ends and the rudimentary attempts to square and dress the timbers. Out of this, undoubtedly, developed the present elaborate system of dovetailing and fitting together the timbers and framework of Swiss houses, a practically nail-less construction scheme.

From the rough habitation of the cowherd was evolved the village house, slightly more pretentious but still of the block-house construction; and being adapted to the exigencies of hillside construction, it was so modified as to present the progenitor of what is now generally known as a chalet.

Following this came two evolutionary

phases of building development in Switzerland, characterized, respectively as the *Standerwand* or stand-wall and the *Regal-bau* or masonry construction. The latter however, is only an amplification or elaboration of the former. One, if not both, of these unquestionably inspired the steel-frame method of modern construction.

The "stand-wall" style of construction differs from the old block building and, for that matter, from most other methods of building, ancient and modern, in that the frame of the entire house is outlined by corner-posts and a skeleton roof before the walls are built. The original chalet, therefore, was built from the ground up, one timber being laid on top of another and dovetailed into a nice contact with ends that protruded beyond the intersecting unions. The second type of chalet was completed in outline and then filled in, as to walls and roof, with wood, plaster, stone or a kind of light brick as fancy or necessity might indicate.

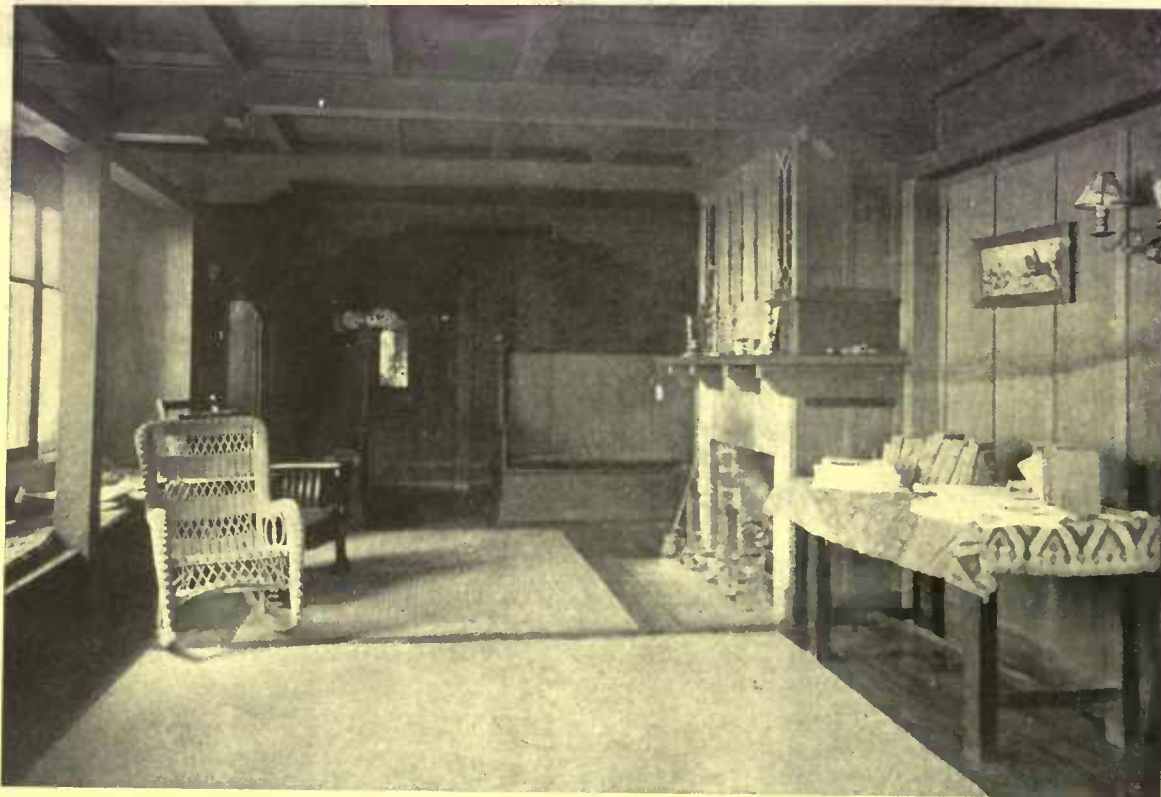
Here it may be pertinent to remark that the foregoing refers to the characteristic *holsbau* or wood construction of Switzerland. In a country so prolific in stone, however, it is inevitable



Buckham chalet, designed by Frank May, shows a similarity to the Berne chalet in its tiers of balconies



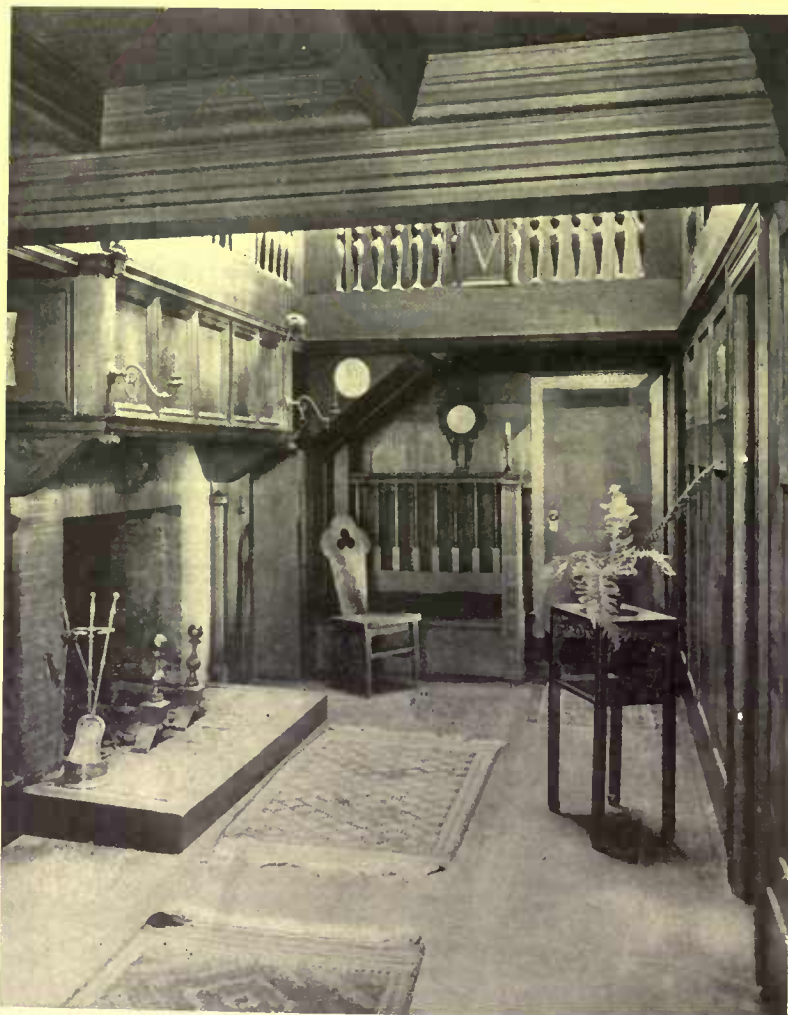
The home of R. C. Hutsinpillar. A pure type of the lowland chalet, giving a good example of the use of projecting roof supports—a common feature abroad. Maybeck & White, architects



The interior of the Boke chalet, Piedmont, shows the possibilities of interior decoration along the Swiss lines. The redwood of California seems peculiarly adapted for this treatment. Designed by Boke & Maybeck

that the latter be used to some extent as building material. Therefore the stone chalet is by no means a rare or illegitimate type, and contrary to the popular belief, a chalet is not necessarily a wooden house. But the American adaptation of Swiss Chalet architecture so closely adheres to the popular conception that we may confine ourselves largely to this very characteristic sort.

While on the subject of American adaptation, it is interesting to note that the architects of this country seem so thoroughly to have understood the motif of Swiss architecture. Simplicity, strength, economy and picturesque harmony with natural surroundings mark the chalet in American architecture even more perhaps than they do, nowadays, in Switzerland where the bizarre influence of foreign builders has added much intricate and fussy elaboration in the trimming of houses. For instance, one sees on most Swiss houses of this and several past generations, much "gingerbread" ornamentation.



An interior in the Polk house, San Francisco, which shows a clever adaptation of the Swiss sawed-wood balusters. Willis Polk, architect

Porch roofs, cornices, doors, windows, often the entire front of a chalet will be encrusted with jig-sawn fret, grill and scroll work, incorporating religious or family mottoes, intricate designs and every sort of distracting embellishment. It reminds one not a little of a wonderful wedding cake or one of the marvelous performing clocks for which Switzerland is famous. But under it all is the solid worth, the wholesome, nourishing delicious product of the baker's skill; the exact and reliable chronological instrument, the house that satisfies body and soul.

It is this underlying theme that American architects have exemplified in Swiss chalet adaptation. And, for the most part, the chalet has retained its individuality to a great extent. A number of Western houses are exact copies of existing Swiss chalets, notably the Reese house in Berkeley, California, which was designed by Maybeck & White from a small model of the Swiss prototype which Reese himself brought across the ocean. It is, as will be seen by observing the accompanying illustration, of the old *blockbau* style, with protruding timbers at the corners.

Alameda county, which includes Berkeley, Alameda, Piedmont and Oakland, and which abounds in hills, furnishes many fine examples of Swiss chalet architecture and a much larger number of less distinctive ones which are, nevertheless, of more than passing interest and display quite perceptibly their relationship to the architecture of the Tyrol. All of these follow the initial style more than the later ones, probably because the former is more original and picturesque than those which came after, and also, because the redwood of California is peculiarly adaptable to chalet building.

Especially is this true of interior furnishing. For in-

Continued on page 339)

Successes With House Plants

FIVE EXPERIENCES IN GROWING VARIOUS PLANTS INDOORS—THE WHOLE STORY OF THE CARE AND TREATMENT THAT BROUGHT THE MOST SUCCESSFUL RESULTS

Photographs by the Authors and Charles Jones

Growing the Primrose

I KNOW of no flowering plant more apt to give perfect satisfaction in the winter window garden than the primrose. In certainty of bloom it far surpasses the time-honored geranium, and in ease of culture its requirements are of the simplest. Good garden loam, well mixed with a little sharp sand and some leaf mould, together with good drainage and not too large a pot, are all the soil requirements, and as it is not a plant requiring a large amount of sunshine it may be grown successfully in windows not specially adapted to the majority of plants—a north window for instance.

However, I prefer to grow primroses in an east window when practicable, but have had excellent success with them even in the trying conditions of a west window. Especially has this been the case with that variety known as Baby primrose. One plant of this species made the remarkable record of blooming all winter in a north window. It was planted out in a north window box in the spring, and continued to bloom all summer and the following winter bloomed almost as freely in a west window, thus giving nearly eighteen months of continuous bloom.

Primroses may be grown very successfully from seed sown in the house in April in shallow flats, pricked out into larger flats as soon as large enough to handle, and when a couple of inches high potted off into thumb pots and plunged into boxes of damp sand in an east window. As often as the pots fill with roots the plants should be shifted carefully into pots a size—no more—larger, until by fall they should be well-grown plants in six inch pots, ready to give an abundance of bloom all winter.

Or if one prefers, blooming plants may be had of the florist in early winter, ready for immediate effect. The most satisfactory way to arrange the plants is to place the pots in window boxes, filling in the space between with sand kept damp but not wet, or if preferred sphagnum moss may be substituted for the sand. In potting primroses the crown of the plant should be somewhat above the level of the soil so that water may drain away from instead of toward the crown, as too much moisture is apt to cause decay



An effective use of bulbs as house plants. The history of these plants is given in table below

at this point; for this reason the plants should never be overwatered nor should water be allowed to stand in the saucers.

As to temperature, the primrose is originally an alpine or boreal plant and still seems to prefer the cool weather. If kept in a room of about 50° F. it thrives best; when it becomes warmer, the blossoms do not last nearly as long.

Where selection is made of the fern-leaved varieties of primroses it will be found an advantage to place the pots on brackets at the side of the windows; this allows the large, beautiful leaves, which are easily injured, to droop in a natural manner, and as much of the beauty of the plant depends on the perfection of its foliage, this is of much moment. A box of the strong-colored red and the white primroses on the window sill, flanked with specimen plants of the fern-leaved on either side, make a beautiful window and one which is sure to excite enthusiastic admiration from all who see it. The varieties most successful for house plants are those of

the Chinese (or *Sinensis*) order. *Obconica*, *Forbesi* and *vercil-lata* are other varying types equally good.

IDA D. BENNETT

Dutch Bulbs as House Plants

FOR rooms that have a cool temperature there are no better house plants than Dutch bulbs, and the fact that they succeed where it is not warm enough for more tropical plants, is by no means their only good quality. Their flowers equal or exceed in beauty those of any other house plant; they have the great advantage of being out of the

way except during the period when they are objects of special interest—and after a season of forcing indoors they do good service as garden plants, where, being hardy, they do not demand the fussing necessary to keep more tender plants in proper shape for future results. Narcissi of the polyanthus type have not the hardiness of the other sorts, but have been wintered over outdoors with extra protection.

Two or three bulbs of the same variety in a four or five inch pot give the most satisfactory results for amateur gardeners who

Table Showing a Succession of Bloom for Three Months at a Cost of Forty Cents.

Variety.	Bulb.	Planted.	Brought to Light.	Season of Bloom.
Paper White	Nar.	Oct. First	Dec. First	Jan. 9 to Feb. 1.
Garrick	Hy.	Oct. Third	Dec. Third	Jan. 28 to Mar. 1.
Poeticus ornatus	Nar.	Oct. Last	Jan. Last	Feb. 26 to Mar. 19.
Empress	Nar.	Oct. Last	Mar. First	Mar. 25 to Apr. 4.

Table Showing Six Pots of Bulbs that Gave Continuous Bloom from Christmas to Easter.

Chinese lily	Nar.	Oct. Last	Nov. Second	Dec. 23 to Jan. 12.
Double Roman	Nar.	Oct. Third	Dec. Third	Jan. 13 to Jan. 25.
Grand Soleil d'Or	Nar.	Oct. First	Dec. First	Jan. 22 to Feb. 13.
Mixed	Crocus	Oct. Last	Dec. Last	Feb. 7 to Mar. 12.
Von Sion	Nar.	Oct. Last	Feb. Second	Mar. 7 to Mar. 25.
Princess Marianne	Tulip	Oct. Last	Mar. First	Mar. 23 to Apr. 12.

Table Giving History of Bulbs Shown in Accompanying Photo.

Mixed	Crocus	Oct. Third	Dec. Second	In bloom Jan. 29.
Von Sion	Nar.	Oct. Third	Dec. Last	In bloom Feb. 13.
(Raised as a water plant)				
Grape	Hy.	Oct. Third	Nov. Second	In bloom Feb. 13.
Roman	Hy.	Dec. Third	Jan. Last	In bloom Feb. 13.
Dutch Roman	Hy.	Oct. Last	Jan. Last	In bloom Mar. 9.



Primroses are certain to bloom, and require little besides drainage and good soil. They do not need a large amount of sunshine

are doing things on a small scale. Woods earth, garden loam and sand, in about equal quantities, with a small amount of very old manure, make a good soil mixture. When potted the tips of the bulbs should be just covered. They are simply watered and set aside in a cool dark cellar until they have produced root growth of sufficient vigor. This point can be settled by making the soil moist enough to come out in a ball when the pot is tapped. If the roots do not show on the surface the plant must be set back for a longer stay in the dark. Bulbs need some moisture to develop roots, but should not stand in a soil that is really wet, as some kinds will mould.

When satisfactory root growth has developed the pots are brought upstairs to the light, and it is well to increase the degree of light gradually. For this purpose we built a home-made table with three shelves, the top one on a line with the window sill where full sunlight could reach the bulbs. The pots were first placed on the lowest shelf, near the floor, for a few days; then on the second one until the foliage had attained a natural green color, which showed that they were ready for the top shelf. This space-saving device also ensured a succession of bloom.

A moist atmosphere is beneficial to the bulb family. The buds sometimes blight if they are grown in a dry hot room. The flowers of some sorts remain in condition for a month if kept in a cool place. It is well to cut all flowers off to prevent the formation of seed pods, but, for the sake of next year's flowers, the foliage should never be cut or bruised. The best grade of bulbs will more than pay for their cost.

When the blooms have lost their beauty the pots should be set in a light cellar to ripen the bulbs. They will not require much water, as the idea is to dry them off gradually. When the leaves are entirely dry the bulbs are ready to store for October planting in the garden. A place that is mouse-proof but not air-tight, away from strong light and with a temperature of about forty degrees, will just suit them during the storage period.

For Christmas bloom some of the quick developing types should be started early: Chinese lily in water—soon after the middle of October; double Roman narcissus early in October; paper white narcissus, October 1st.

I. M. ANGELL

An Ideal Plant for the House

TIME and again I have been asked what I considered the best all around plant for the house and without hesitation I have replied that nothing could equal the *Kentias* for first choice and the *Aspidistra* for second. Both of these are excellent for the house and will stand the rough usage to which all plants are subjected to a more or less degree, and look well under

it. During the past winter I have been forced to revise my list of suitable plants and instead of topping it with *Kentia* I now write *GREVILLEA ROBUSTA* with capital letters. This plant is an old one and for years I have used it for many decorative purposes with great success but never tried it under house conditions not thinking it just the thing for such purposes. The test that I gave it convinces me that it is an excellent house plant; that it is as hardy as either the *Kentia* or *Aspidistra*; that it is by far more decorative; that it is adaptable to many more uses, and that it can be grown by the dozen or hundreds with little labor and small cost. On the streets of San Diego it grows to a height of seventy-five feet adding to its decorative foliage effects great clusters of flowers, making a singularly beautiful street decoration.

To get a stock of these plants for the winter start the seed in the spring. Sow in shallow boxes or in pots and when large enough give successive shifts into larger pots as the growth demands. In transplanting from the seed boxes the plants are a little apt to be slow to start growth, but if they are not allowed to dry out they will eventually establish themselves. During the summer months they may be plunged out in the garden where they can be cared for by proper watering. In the fall pot them two or three weeks before taking into the house. To make a very attractive pot put four or five small plants together. Use rich loam with good drainage. A window box filled with small plants is to be recommended for inside use in a sunny window. Fern dishes with small plants look well on a table. It is however with the large plants that the best results are to be had.

If you have had good success with your seedlings, the plants should be about twelve to eighteen inches high by fall and these will continue to grow after being taken into the house. With the older plants the lower branches are apt to drop off but by pinching out the top of the plant a growth can be forced in the place of the lost branches; the second year should see the whole plant very much improved. Half a dozen two-year-old plants grouped in a large pot with smaller plants to hide any loss of leaves at the base will be attractive. In fact such an arrangement can be kept in good condition for season after season by judicious pinching and watering.

Two plants like this in a room will give an effect not possible with any other kind.

Unless sowing has been done in the spring the best way would be to buy a plant at a greenhouse and experiment with it the coming winter. The following spring if large plants are wanted for the fall sow early but for smaller plants make your sowing later. Many greenhouse men do not carry the *Grevillea* over the second season because of



When the masses of flowers appear upon the decorative foliage of *Grevillea robusta*, it is unsurpassed as a house plant

its tendency to drop its lower leaves, but this is nothing against it, for as I said before, pinching will remedy this so that if you can buy two year old plants do so and fill in about them with smaller ones.

L. J. DOOGUE

The Rubber Tree

NOT the best, but an excellent house plant is the rubber tree. Its recuperating powers make it a splendid plant for the woman who is apt to forget. It may be neglected for weeks whereupon with plenty of sunlight, water and warmth and a thorough rinsing of its leaves it soon flourishes again. Under this manner of treatment, however, the lower leaves drop and irregular branching is induced because of the sprouts that start readily enough during each period of tender care. Gas and dust must be present in very appreciable quantities to effect the plant seriously and ordinary room temperature is satisfactory.

With the loss of symmetry most of the indoor decorative value of a rubber plant vanishes. A rubber plant is at its best as an interior ornament when large, uniform leaves, free from blemishes, clothe a straight stem from its very base upward. The secret of perfect development is continuous growth. Careful watering, a uniform temperature and plenty of sunlight will do this. Spasmodic growth invariably produces an unsymmetrical plant. A plant set in a window should be turned, preferably one-fourth round each day, so that all sides may receive the same amount of sunlight. The tendency of plants to grow toward light is a distinct advantage to a rubber plant when it is used to decorate a sunlit corner. A plant thus placed will soon fill out the corner nor abate its vigor because of its one-sided development.

As to soil, the plants have little preference. The writer has obtained excellent results potting rubber trees in soil composed of equal parts of sand, ordinary garden loam and well rotted manure. This mixture should be perfectly dry and sifted through a screen of small mesh, a little larger than fly netting. In repotting, after removing as much of the old soil as is possible without injury to the roots or changing their relative position, this mixture is poured into place as one might pour sand. After this is firmed, the pot is then set into a basin of water which, working

upward, will completely saturate the soil. Likewise with subsequent waterings, best done twice a week if the air of the room be very dry, set the plant into the bath or wash tub with the pot half immersed. There is no need of sprinkling, wiping both sides of the leaves at least every other day with a wet sponge affords all the cleaning necessary.

A rubber tree invariably outgrows its room, though the difficulty can be



With proper care and attention the new fronds of the Boston fern almost cover the pots and touch the floor

greatly helped by cutting off the terminal buds. This induces branching for which there is no alternative if the plant is to be held within bounds. The buds should be cut off squarely just above the leaf that grows out beneath them and the cut end seared to stop the flow of the milky juice. Where the cutting of the terminal buds is attended to soon enough, and the branches headed in when of the proper size, a very compact and well foliated tree results. With intelligent care a rubber tree remains fit for room decoration for many years.

C. L. MELLOR

The Care of Boston Ferns

ON a spacious north veranda of an old Southern home in the famous Bluegrass region of Kentucky, one may see in August or September five of the most magnificent Boston ferns that can be grown. They are all in fourteen-inch pots, and when looking from one to the other, you cannot tell which is the most luxuriant or the finest specimen. During the months we are out-of-doors constantly, they make this veranda a most charming spot and in winter add an attractive appearance to the dining room, with its large south and west windows.

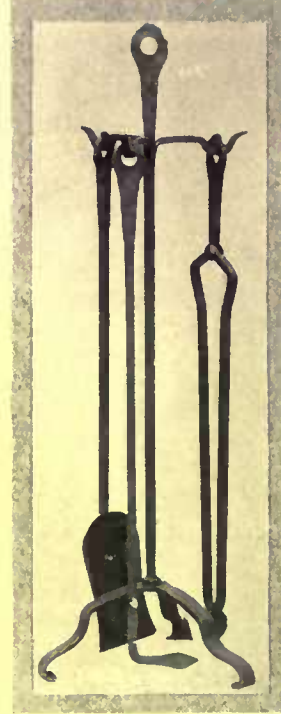
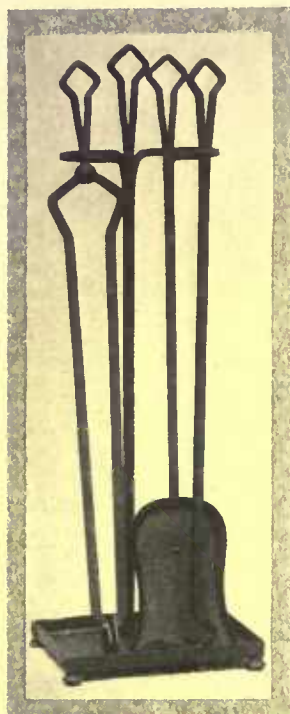
When I came home from school seven years ago, with the time to really enjoy my Southern home, I began the culture of ferns with a very healthy small Boston fern I selected from those in the greenhouse. This the florist planted in a swinging basket for that season. I did not like it in the basket, so transplanted it to a pot very soon afterward, and with my care it made splendid growth. The next spring I divided it, making two, the next spring three, and now I have five as described above, and have given away many to my neighbors and friends. All the slips are bid for a year or two ahead, with a request for directions of "how to grow them."

In the month of March, during good weather, I have the best rich soil that can be found on the place, brought into an out-building to be used for my transplanting. It is usually found in some place where leaves have collected and rotted. Then shortly afterward I have the plants carried out from the dining room to this building; taking each one in its turn out of the pot, I shake all dirt off and cut out all of the old growth, leaving just the new, unbroken fronds. I have ready the biggest old cinders from the ash pile, to make a drain in each pot three or four inches deep. Upon this a layer of dirt is put. I first cut out, with a sharp knife, one-third of the roots with fronds attached, to be used for further propagation. The remainder is pressed together to get the plant in good shape and is put into the pot, filled in with the dirt pressed very firmly, and thoroughly watered. It is soon carried back to

(Continued on page 334)



A rubber plant near a window should be turned around one-fourth each day to develop evenly



A fireplace in which the wrought-iron fixtures are eminently in keeping. Shown at either side are fire sets also in suitable style, which cost \$9 and \$11, respectively

Fireplace Fixtures

INTERESTING ARTICLES FOR USE ABOUT THE FIREPLACE WHICH ARE PRACTICAL AND AT THE SAME TIME DECORATIVE HELPS TO THE ATTRACTIVENESS OF THE HEARTH

BY JONATHAN A. RAWSON, JR.

Photographs by Mary H. Northend and others

JUST as the fireplace itself claims and receives credit for combining in the largest degree the attributes of ornamentation and utility, so in equal measure are each of its special fittings and furnishings entitled to distinction of the same sort. Itself a decorative feature of a room and an eminently useful and comfort-giving one at that, it has a distinctive group of furnishings all its own, numbering not less than seventeen. Each of these articles was first made for practical purposes and became decorative later. No fireplace requires all of them to insure its serviceability, and, in fact, any hearth with so lavish an equipment would in these days of simplicity be sadly overdressed, like the shelf or table crowded to its utmost capacity with bric-a-brac of all sorts and conditions. Of the seventeen pieces, several are designed to do the same work in different ways, like the andirons and the basket grate, but even these are often combined with pleasing effect, the basket resting upon the rear extension of the irons behind the posts.

The fireplace should not be denied its own particular equipment. It is so much easier to have all the things right at hand, and then when to their handiness are added their decorative talents and their intimate memories of the past, their case is complete and their title established to places of honor and distinction in the best



These brush steel andirons, of an English type, hold a useful poker on brackets

room in the house. The fireplace itself requires no champion or defender. Its subordination to the stove and the furnace as a heating power regardless of its mission as their occasional auxiliary, can never accomplish its banishment. On the contrary, it is nowadays often the axis on which the entire decorative system of a room or a house revolves, and we would almost as willingly plan a room without a window as an entire house without at least one fireplace. And as the fireplace is therefore bound to survive, its furnishings are bound to survive with it and retain with it the best traditions and associations of the early days. They shared the obscurity of the fireplace during its dark ages that followed the arrival of the first specimens of modern heating and cooking appliances, but

there is no longer the danger that they will ever become obsolete or that in years to come they will be found only in the exhibition halls of the historical museums.

Fireplace furnishings defy classification. They can only be enumerated and even then it is not worth while to attempt their listing in the order of their importance, except the andirons which are first and foremost by every consideration. As the fireplace is the dominating presence of the well planned room, so the andirons are the presiding geniuses of the well furnished fireplace. The mantel, its shelf, the facing, the hearth, the underfire and the



Bellows of good design in repousse brass. May be had with long handles for \$8.25

lining are integral component parts of the fireplace proper and are not to be classed as furnishings, but as elements of the thing itself. After they are in place, the andirons or some other device must first be installed to serve the same primary purpose, which is to raise the fuel from the underfire or floor to obtain draft and aid combustion. But we are more than likely to develop a strong preference for the andirons over and above any substitute that may be offered for them.

Broadly speaking, all andirons made to-day are either antique or modern. There is nothing medieval, because of the years of obscurity through which the fireplace passed. Andirons have very carefully defined classifications as to periods and styles and no mistake in room decoration is more repulsive to those versed in period work than to permit the andirons to be out of keeping with the period of the room. The good old-fashioned andirons with their fine simplicity of line are yet to be excelled in beauty and although much

of the modern work is based on Colonial modeling, none of it is better than the original. Genuine antiques are becoming rarer all the time, but modern manufacturing methods make good the scarcity of originals by supplying the original forms with entire faithfulness, except that in the olden days the andirons were generally of solid material while now they are usually hollow, but every bit as good in service.

While brass was the correct thing for the andirons of the Colonial parlor or dining room, hand wrought iron served every purpose in the old New England kitchen fireplace, which, by the way, has given us the pattern for

as some of the others, they are still most practical and suitable for many fireplaces, particularly those constructed from modern rough surfaced brick in its numerous colorings.

Next to the andirons, the fireplace's tool set is perhaps its most useful companion. When complete the set consists of the stand, shovel,



The old English seat fender with its upholstered top, is pulled out from the hearth and used as a settee



A good combination in iron of fire-screen, andirons, and wood basket; this last can be bought for \$12

tongs and poker, and a long handled brush is sometimes added. The correct place for the tool set and its stand is just at the side of the opening, but those who want the tool set without giving floor space to the stand can accomplish their desire by using the old-fashioned jamb hooks, which are set in the brick work at the side of the opening. These hooks can be had to match many of the antique outfits, but never were commonly used with the brass sets. A good stand with its outfit is always ornamental and does much to add to the old-fashioned atmosphere. Period work is also carried out in the sets, but with less variety than in the andirons. In placing fire tools the jamb hook has a distinct advantage over the stand in that it requires no floor space and cannot be tipped over.



There is a limitless variety of good Colonial patterns. Such andirons cost from \$7.50 to \$20

much of our best modern fireplace arrangement. In many instances these andirons were almost devoid of ornamental characteristics, but they were always graceful, no matter how simple they were. The steel andirons have various finishes, and while not as closely defined in their period affiliations

It is of course not necessary to buy the tools in complete sets, although they are usually found in that way. Among the separate tools that have recently become popular is a trident poker, 42 inches long, and made wholly of wrought iron, for \$6, or with brass handles on iron for \$8 to \$12. Also long tongs and shovels for big fireplaces can be had as separate pieces. Since the biggest of the old-fashioned fireplaces were usually in the farm-house kitchens where iron was used for the furnishing, these larger implements are generally of that material nowadays.

It is doubtful if the fireplace has a more decorative companion than its screen, the chief usefulness of (Continued on page 327)



A characteristic repousse brass wood-box, which is worth \$23.50, can be matched with other tools

Planning the House and the Garden Together

A PLEA FOR THE DEVELOPMENT OF HOUSE AND GROUNDS FROM A DEFINITE CONCEPTION PLANNED OUT IN ADVANCE—THE GOOD RESULTS OF CO-OPERATION BETWEEN ARCHITECT AND LANDSCAPE DESIGNER

BY LOUIS BOYNTON, ARCHITECT

Photographs by the Author and others

THERE has been a great deal written about the planning of the house and about the arrangement of the grounds; and there have been endless pictures published of them—both together and separately. But while the fact that there should be an intimate relation between the house and its surroundings is more or less generally understood, some recent experiences of my own have brought it home to me that this is a point that needs emphasizing.

It does not seem to be commonly realized that the placing of the house on the ground and the arrangement of the grounds in relation to the house, should be a matter of design; in other words, that it should be the result of a perfectly definite conception arrived at in advance, and that the whole arrangement should be thought out quite fully when the house is designed. Nor is it commonly considered that the house and grounds should be designed as a unit and that neither should predominate.

Some time ago I was talking of this very thing with a friend who said: "Yes, I see. It is as if you had a stone of a certain shape and color; the setting should be designed to fit it." My answer was that was not at all my meaning. To my mind a much finer way would be to design or imagine an ideal ring, for instance, and then get the exact gem to take its place as a part of the whole and in relation to the desired setting. The stone and the setting should be of equal importance and the result of a preconceived idea. This, of course,

does not preclude the possibility of getting very charming effects where one or more of the elements are predetermined. I find that far too many people fail to realize that the man who designs a house has any interest or responsibility beyond the actual walls of the structure. It is common—perhaps usual—to expect an architect to design a house which so long as it does not exceed the size of the available ground, may be located by the owner, in a more or less perfunctory way, without either asking or taking the advice of one—either architect or landscape designer—who has the peculiar kind of vain imagination necessary to visualize the effects which will result from any given arrangement. Good design in any field is only the result of a specialized and highly trained imagination.

Of course in the small suburban "lot" there is generally no choice; the location of the house is determined by the fact that there is no room to spare and by the established distance from the sidewalk at which houses are being built. However, I venture to say, that in the case of a lot of a hundred feet square or over, there are almost always several possible arrangements and that the obvious and frequently commonplace scheme is by no means the best.

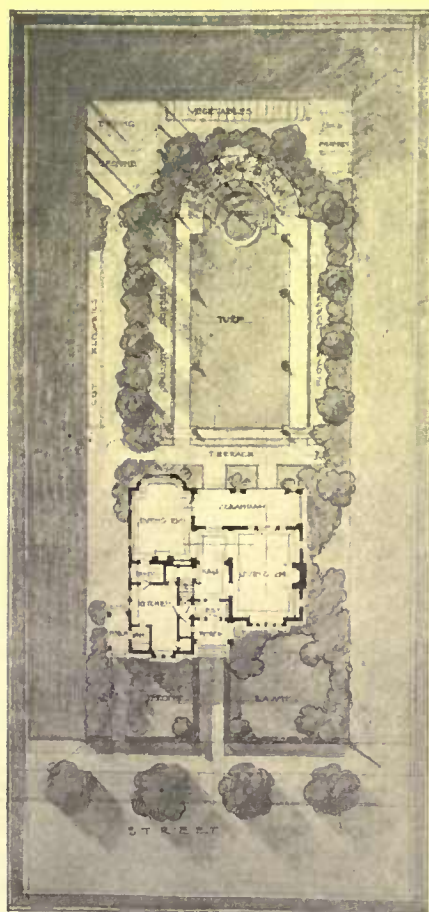
Of course the first considerations in a country house are the relation to the sun and the prevailing winds, the contour of the ground and possible views. These elements affect the layout of the grounds as vitally as they do that of the house. The writer had an in-

does not preclude the possibility of getting very charming effects where one or more of the elements are predetermined.

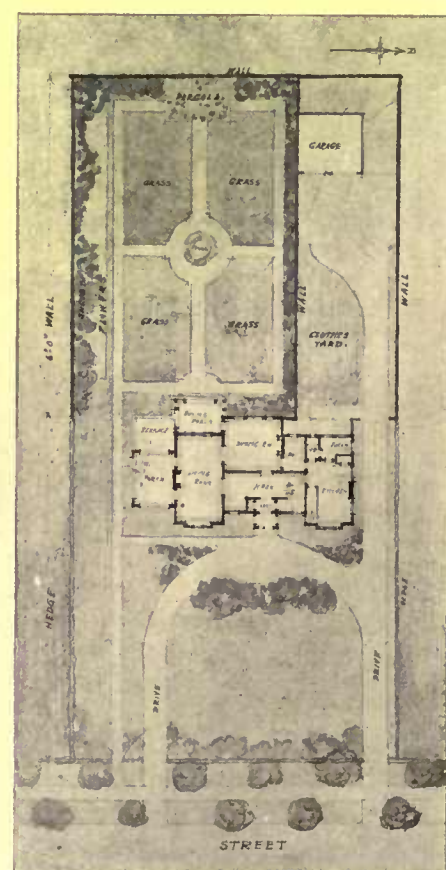
I find that far too many people fail to realize that the man who designs a house has any interest or responsibility beyond the actual walls of the structure. It is common—perhaps



If house and garden were planned independently, a uniform whole such as this would be extremely difficult to obtain



Mr. W. P. R. Pember, architect, has made the most of a lot 60 x 150 feet



On this lot, 100 x 200 feet, the desired isolation between service yard and garden has been obtained. Louis Boynton, architect

teresting problem a short time ago in a lot 100 by 200 feet which faced east with the narrow side towards the street. The house was to be designed for the conditions prevailing on the south side of Long Island where the prevailing southwest summer wind is a very important factor. Obviously, if the house were placed with the principal rooms toward the street, they would not get the benefit of the cooling winds of summer. In consequence it was so designed that the rooms faced for the most part toward the rear of the lot and gave on an enclosed formal garden 70 by 100 feet. This left a space 30 feet by 100 for clothes yard, garage, etc. As the house was about 30 feet deep this placed it 70 feet back from the street and left an ample space for lawn and carriage drive in front. Of course in planning a house which is large enough to allow of any departure from the stereotyped forms, the architect's first duty is to study the habits of the owner so as to provide the accommodation which will, if possible, exactly fit the needs of the family which is to occupy it. Exactly the same conditions should govern the planning of the grounds in relation to the house. If the house is to be used only part of the

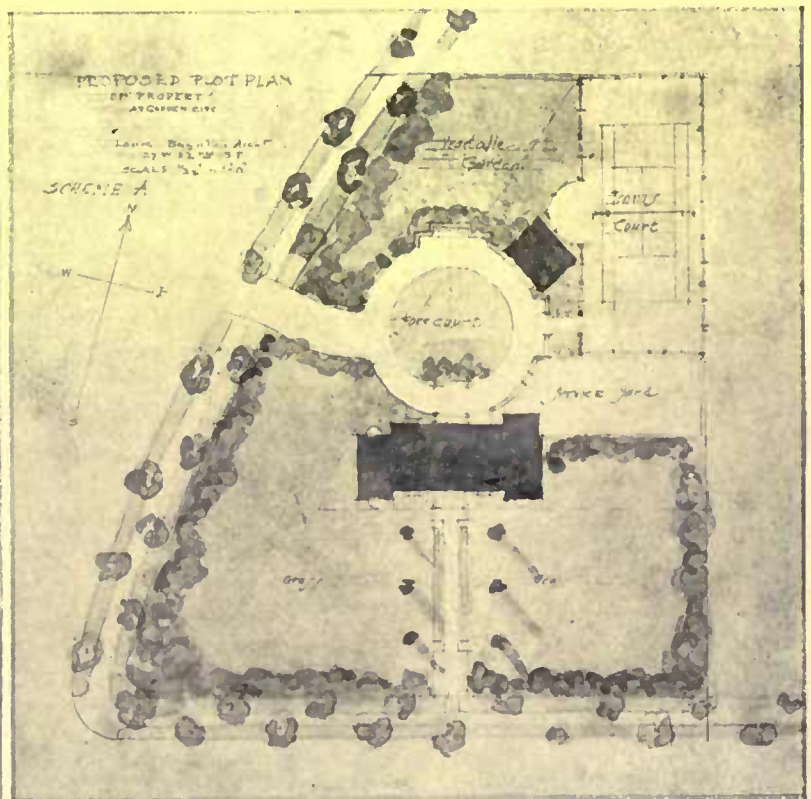
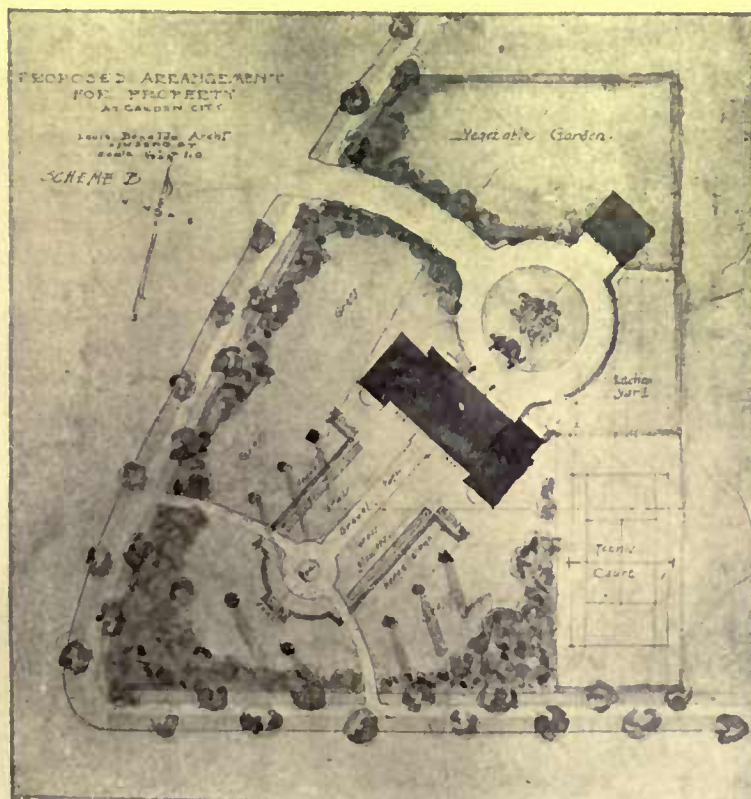


It is very helpful to a layman to have a drawing made, almost photographic in its quality, showing the relation of the proposed building and its garden setting

year, the character of the planting and the decorative treatment of the grounds must, of necessity, be vitally influenced by the season or seasons when the place is to be in use. If, as frequently happens in the suburbs, a place is to be occupied through the school year, and is to be vacant for three or four months in summer, the emphasis should be placed on the effects to be obtained in winter and the early spring and late fall. On the other hand, when the house is to be used largely in summer, the winter effects are comparatively unimportant.

The cost of upkeep is also a matter to be carefully considered. It would be absurd to plan a place that would require two or three gardeners when the owner would feel that one man for a day or two a week was all that could be managed.

The Corey place at Newton (of which Chapman and Frazer were the architects and Mr. Stephen Child was landscape architect), is an excellent example of a sensible and artistic planning. Here the owner was an automobile enthusiast and drove large and heavy cars which demanded a carriage turn of sixty feet diameter. This, by the way, is the minimum size for turning a large automobile comfortably. A smaller turn would necessitate

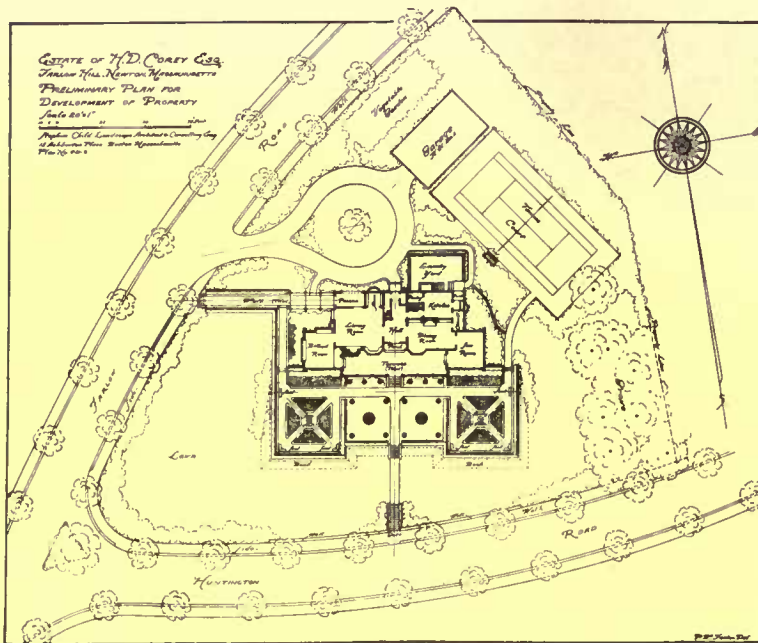


Two schemes for the development of an approximately triangular plot between two equally important streets. The scheme on the left shows the architect's method of securing individuality and a much more spacious approach. The owner, however, preferred the more stereotyped form to the right, having the house line up with the others in the block

backing, which as a constant practice is injurious to a car. This place comprises about an acre and, as the plan shows, slopes considerably toward the south. It is the result of co-operation between the architects of the house and the landscape designer who had the grounds in charge. As the owner wanted to get an effective winter planting as well as to reduce the cost of maintenance, the planting was largely done with evergreens and the evergreen or hardy shrubs—that is to say, rhododendrons, barberry, and such plants as are effective and beautiful the year around.

Another very intelligent and effective example of such planning is Mr. Ellicott's house near Baltimore. The place was designed by Ellicott and Emmart and is only about an acre in extent. As the plan shows, it is a pentagon with the street on the north side. The land slopes toward the rear giving a view across the river over the tops of a rather dense growth of forest trees. The principal rooms face on a broad terrace at the rear, beyond which is a semi-circular grass terrace with a small pool in the center. To the left of this terrace is a kitchen yard enclosed in hedges and to the right is a more formal garden from which a rose garden extends to the south. A careful study of the plan and the views of the garden will show a very skilful adjustment of the various levels. The shape and contour of the land allowed a successful use of more motives than would be generally advisable in so restricted a space. If the land had been flat it would have been necessary to try more uniform arrangements or the effect would have been crowded and fussy. To my mind the attempt to do too many things in a restricted space is almost as bad as an entire lack of imagination. The result becomes confused and nervous and lacks the effect of quiet placidity which should be the key-note of any good design.

Mr. Pember's design for a place only 60 feet wide and 150 feet deep is an ex-



The estate of Mr. H. D. Corey was developed through the co-operation of Mr. Stephen Child, landscape architect, with Chapman and Frazer, architects. The sloping site determined the main features

cellent example of what may be done on a small lot. In the first place the rooms are so arranged that the principal windows face with the front or the back of the house. The windows at the side are unimportant and the kitchen is placed so that it will not monopolize the rear and turn it into a mere "back yard." The veranda is placed on the rear in such a way that it may be used as a dining porch. Back of this is a garden separated from the house by a terrace. This garden is designed to appear as large as possible. The central feature is a simple panel of turf extending to a semi-circular pergola with a pool for aquatic plants. This is backed up by a mass of hardy shrubs, which forms a background to the garden and cuts off the unpleasant features of the neighboring back yards. Beside this there is space for drying ground, coldframes and a small vegetable garden. Really this is a most successful use of a very limited space.

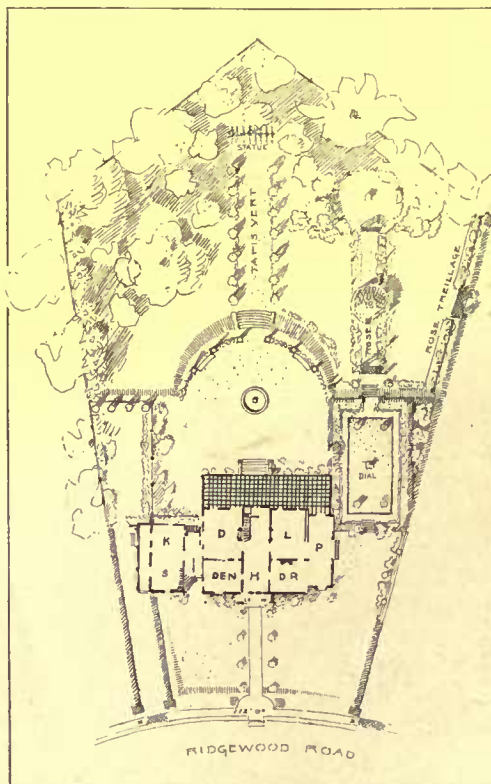
There can be no question that in the case of any of the examples given here the success of the place is the result of an intelligent planning, and that the relation between the house and grounds was most carefully considered as one problem at the outset. The result could not, save by the merest luck, have been achieved by building the house first and then wondering how best to arrange the grounds to fit the particular style and its position.

The placing of the house on the land; the study of the proper approaches; the consideration of the different levels and their possibilities in relation to the size and the points of the compass should all be clearly borne in mind at the time the house is being planned. The architect's drawing of a house at Garden City reproduced here shows the extent to which the consideration of the whole relation of a house to the grounds may be carried. At the time when the drawing was made there was nothing but a level lot to suggest the ultimate effect.

(Continued on page 334)



A view of one corner of the Corey house, showing the garage and tennis back-stop



The home of Mr. Ellicott shows an ingenious development of another irregular site. Its success has been obtained by designing house and garden together



Along one side of the Corey house extends a broad terrace with the principal view

Homes That Architects Have Built for Themselves

THE CITY HOME OF MR. STOWE PHELPS IN NEW YORK—
AN EXAMPLE OF ADAPTING THE INTERIOR SCHEME TO
FIT A LONG, NARROW HOUSE TO BEST ADVANTAGE

BY STOWE PHELPS

Photographs by Henry H. Saylor

THE small daughter of a well known architect once asked her father if he would buy her a pony.

"Why, dearie," he replied, "you must remember that you are the daughter of a poor architect."

"Well, papa, if you ever got to be a good architect do you think I could have a pony?" which may intimate indirectly why an architect's own house may some times fall far short of what he himself would like to have it.

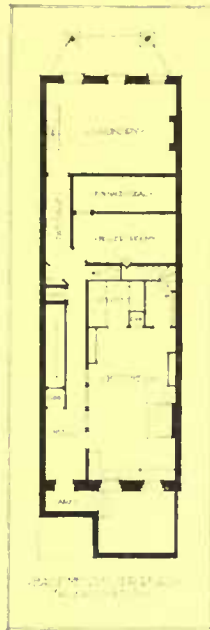


The pantry is lighted from a shaft, and from sliding panels

The architect has only one advantage in being his own client, in that he doesn't have his ideas frustrated by some other body's peculiar personal equation or bad (?) taste; otherwise the limitations and difficulties are about equal.

The first step is the choice of a site; or of a house, if alterations are contemplated. If choosing a house, an eye is naturally kept on the "possibilities" of the existing building, even if the alterations amount to leaving nothing but the original key-hole.

In my own case the conditions as found were promising. The house had four stories and basement, was 20 feet wide and 60 feet deep (which is 10 or 15 feet deeper than the average in New York) and it also had a low stoop, obviating the necessity of changes on this



Each branch of the domestic department has its own place

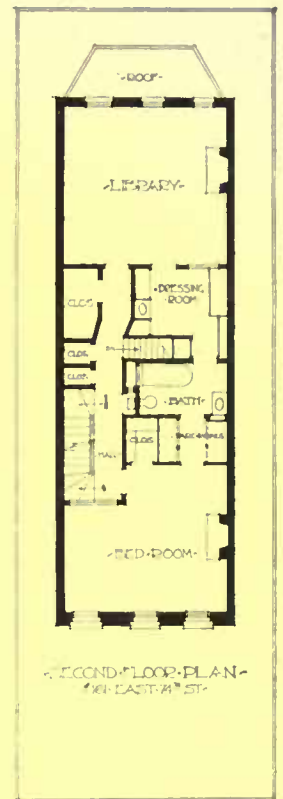
account. It was decided to have a living-room (to be used also as a studio) and a dining-room on the first floor, a library on the second floor, and the rest of the upper stories for bedrooms.

Now, the ordinary block house has a long thin drawing-room next to the entrance hall in front (with a facial expression much like a Pullman car), and a good large dining-room in the rear, usually all out of proportion to the size of the drawing-room. A butler's pantry extension usually projects out behind, taking off much light from the dining-room and much space from the back yard.

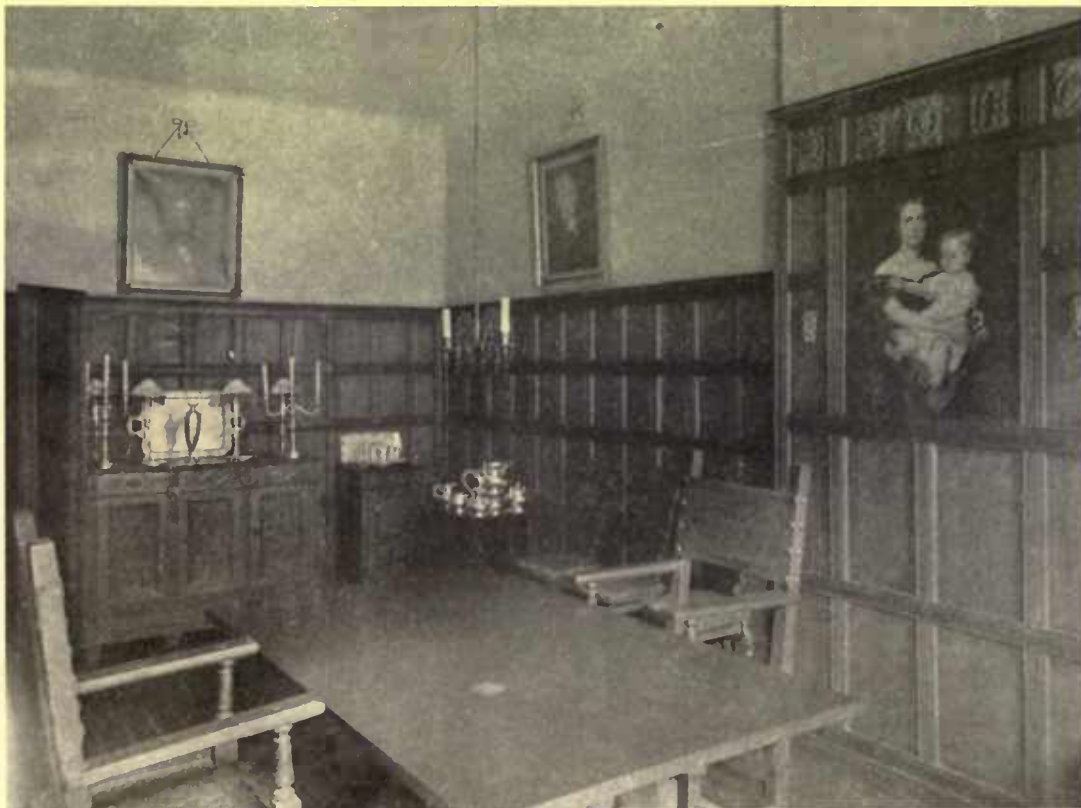
Instead of following this ancient and honorable custom, the dining-room was put in front (where the sun was), the pantry in the middle, and the living-room-studio in the back where it got the north light.

Putting the pantry in the middle is not liked by the servants, it is admitted; nor do they probably care for bedrooms on the top story. It is imaginable that they would consider an arrangement with the pantry in front and the dining-room in the middle of the house much preferable; but it seems unwise to encourage these sentiments unnecessarily.

The dining-room in front became of necessity the long narrow room



The architect has given the important rooms best lighted positions



The dining-room became the long, narrow room admirably adapted to an English style of decoration



The studio, thirty-two feet long, serves also as a living room, and from the front to the commodious fireplace is furnished for that purpose. Work is restricted to the bay window and north light in the rear

(12 feet 6 inches wide) which lent itself to an English type of decoration with a refectory table. The condemned pantry receives light and air from a shaft and from secret doors in the paneled wainscoting of the dining-room, which can be opened when that room is not being used.

The studio is 32 feet long, including the 6-foot bay window which is the full width of the room, and has a good "top" light for painting. So much for the general arrangement.

The woodwork in the first story throughout is cypress finished with one coat



A suggestion of English motive is given to the studio by the leaded casements and the wooden ceiling with its pendentives

of stain. It was only after much searching that a stain was found that would give satisfactory results with one coat.

The dining-room is paneled with an Elizabethan detail, to a height of about seven feet, with the plaster left rough above, and has leaded glass casements, glazed with a very pale amber cathedral glass, which gives a warmth of tone to the room whether the sun is shining or not. The furniture is of oak, the table being arranged with extension pieces which can be fastened onto the ends and increase the length from six to eight or ten feet, seat-



A combination of restful and quieting green has been used for the color in the library upstairs, which is furnished with a collection of objects gathered from all corners of the globe



ing twelve people. Candles are the only artificial light used in the room.

In the entrance hall the space under the main stairs is used for coat closets and telephone.

A suggestion of English motive is given to the studio by the leaded casements and the wooden ceiling with its pendentives, which, however, wander from their "period" in being colored in dull greens, reds and gold. Still farther wanders the furniture, which starts properly with an English oak chest and the carved columns of the mantel; continues with a Spanish leather screen, some Italian chairs and candlesticks, an Egyptian lamp; and then proceeds to the Orient with Russian silver icons, Indian and Burmese Buddhas, some Chinese porcelain, Korean candlesticks, and a Japanese altar table, bronzes, and temple hangings. All this on a background of black, and gold Japanese burlap, and lighted at night by four hanging lanterns and a few casual lamps and candles. Home industries are recognized in the green linoleum on the floor, which has been stained dark brown and then waxed. A very catholic collection indeed, but quite pleas-

ing in its harmonious tones of browns, tans and dull reds, with an occasional interesting spot of color.

A combination of restful and quieting greens has been used for the color in the library above, which contains another heterogeneous collection of objects acquired in various trips around the world, including a Korean chest used on its native heath for
(Continued on page 335)



Although there is a heterogeneous collection of various styled furniture, the whole is rendered harmonious by the use of kindred tones of browns, tans and dull reds



The two-foot hedge of white feverfew can hold the garden boundary against the onslaught of the weeds, even such arrogant gentry as June grass and chickweed

The Garden That Came

THE TALE OF A GARDEN AND THE SOURCES FROM WHICH EACH FLOWER CAME—
HOW THE DIFFERENT CORNERS OF IT ARE MEMORABILIA OF PLEASANT EXPERIENCES

BY GLADYS HYATT SINCLAIR

Photographs by the Author

I TRULY believe that flowers are like cats and children: they run to those who love them and hide from those who don't. Or is it that only garden lunatics have eyes that will spy and hands that will minister to those plant strangers that would gladly dwell within their gates—and are so quick to share their treasures that all are glad to share with them? Anyway, it seems that when people ask me of my dearest garden dwellers, "Where did you get that?" I have always to answer, "Oh, that came from—" and it's usually a record of some most pleasant experience.

From where? Everywhere. My garden is like our grandmother's patchwork quilts or their daughters' autograph albums; a record (a living, growing one, thanks be!) of loving friends and happy visits and pleasant incidents. It is more; a missionary garden which has literally "rescued the perishing" and fed the "worthy poor."

For instance, the very fall that I left the old garden for the new—which was a potato field—the grandmothers of all this tribe of hollyhocks came from a railroad embankment where their roots had gone two feet down into the inhospitable gravel searching for food, while their starved leaves were about as big as the palm of my hand.

These hay-scented lady ferns that glorify my shady border came from the banks of Grand river in April, on the first one of a summerful of never-to-be forgotten launch rides. My hardy roses, the shell pink blush, beautiful of buds and beloved of bugs; the ancient English York and Lancaster; the mosses and

cabbage and brave old sweet brier, came from my husband's birthplace—the homestead his father cleared from the wild, thirty miles straight into the woods from the nearest store or post office. That flowering currant that flings its clean perfume at evening, this lusty bumpkin of a trumpet creeper over the arbor, and those monstrous "sugared lilacs" with their evergreen carpet of myrtle came, unmissed, from a mass of greenery that was doing its best to cover the desolation of a burned home, deserted these ten years.

The wild phlox that tosses its whorls of purest lavender through all the merry May, with arabis, poet's narcissus and English daisies for cheek-to-chin neighbors, came some hundreds of miles in a suitcase, souvenir of a canoe trip down Opie Read's paradise, the St. Joe river.

That two-foot hedge of white feverfew which can hold the garden boundary against the onslaughts of even June grass and chickweed, came in a letter, and the "fairy flax" that opens a thousand blue, innocent child eyes to me every summer morning, all came from a single plant sent me when in full bloom by a lady who wished to know its name. The spruce and jaunty cornflowers here and there came on the wings of a mischievous zephyr, and the lemon-lilies, forget-me-nots and iris came from my mother's old garden on the banks of the blue St. Clair, on my garden's first birthday—and my first.

These hardy chrysanthemums, golden and bronzy and snowy white, came from the yard of an old lady who called them

artemisia. They were in exchange for Oriental poppies that I had raised from seed. That riot of bogus sunshine in front of them, the most frenzied supporter of the Rooseveltian baby-theories I ever saw, came two springs ago as California poppy seeds that had stowed themselves away among some violet roots.

The thrifty, neat clove pinks that have taken the contract to border every border I shall ever possess, once upon a time scrambled through the fence of a country cemetery and gadded gaily down the road to seek their fortune. Soon they met a Giant for whose seven bonny daughters I had just planned and started a flower garden. The Giant persuaded the pinks to travel in his coat pockets, and half of them were brought to me as a thank offering, and half planted in the new garden to teach the seven daughters how to grow trim and fair and fragrant.

The Hall's honeysuckle vine on the trellis and my Frau Karl



The sweet rocket that hurries to complete her masterpiece of white and lavender uses the woodbine behind as a background

Druschki rose came as stems in a bouquet; the white clematis, Virgin's Bower, came with those dogwoods and that Judas tree, their feet in a picnic lunch basket, their heads trailing ingloriously. The biggest spiraea, Van Houttei, was one of a carload of whips sold to the school children at five cents each, while the wild grape vine on the back porch, the bergamot so valuable for sweet green in bouquets, and the flowering spurge, almost equal to gypsophila for fine white flowers, came all at once from a parched and dusty highway one sultry day in June!—because it was then or never.

The wild plum trees that shade the swing in the corner came with the birds, I suppose, long ago; and the ribbon grass that creeps about their roots flagged my attention with its creamy pennons beside a tumble down bridge and a crumbling cottage wall just out of town.

(Continued on page 333)



Such queens of the garden as Madonna lilies and this bank of Shasta daisies do not come except in exchange for very hard cash, but for all their beauty, they haven't the loving memories of some of the more modest ones

The Proper Finishing of Hardwood Floors

THE VARIOUS METHODS IN USE FOR THE TREATMENT OF HARDWOOD FLOORS—SUGGESTIONS
ENABLING ONE TO BEGIN PROPERLY AND TO KEEP THE FLOOR IN GOOD CONDITION

THE subject of finishing and caring for hardwood floors is one that is a little difficult to put in condensed and concrete form, because of the many different methods of finishing and the different conditions under which people have floors that need attention of this kind.

Beginning with new floors, the matter is comparatively simple and resolves itself into a choice of two or three different finishing methods and a variety of stains and color schemes.

The first essential in finishing off a new floor is to use what is termed a filler, and fill up the pores of the wood. There are several recipes for making fillers at home out of cornstarch, linseed oil, and things of that kind, but usually it is cheaper, simpler, and more economical to buy from a paint supply house a wood filler in paste form. To thin this filler for application to the floor one has the choice of using turpentine, benzine or gasoline. Really the benzine or gasoline serves best and is cheapest. Moreover, there is no practical difference between benzine and gasoline except the difference in the flashing point. You dissolve the filler in this until it assumes the consistency of an ordinary liquid paint, apply it to the floor, and then rub off the surplus filler as soon as it gets dry.

The best plan to handle this is with two at work, because benzine or gasoline evaporates rapidly and you must work swiftly. One spreads the filler and the other follows after with some cotton waste, rags, or excelsior, and just as soon as the liquid begins to dry, but before it gets hard, rub it well into the pores of the wood and scrub the surplus that is not absorbed.

There should be included in this filler whatever stain is wanted for the floor. Ordinarily, on an oak floor, not much stain is required. One can get some of the light oak stains that are furnished by the paint houses and add enough of them to the filler while it is in liquid form to give the stain required. Any stain may be added in the same manner; that is, any liquid stain, or one can take the dry powdered stains and add them to the liquid and get whatever color is desired.

After the filler and the stain is on the floor let it dry 12 or 24 hours, then begin the finishing process.

Here we come to the point where there is a choice of several finishes. If it is a floor that has been scraped on the surface and is intended for the parlor or dining-room, or for dancing, the best finish is to use two or three coats of shellac as a foundation on the wood and then finish with floor wax.

To do this, apply the first coat of shellac 12 to 24 hours after the filler has been put on. Then, let this stand for 6 to 12 hours,



The irregular, uneven appearance of this floor surface might have been obviated by the use of a good wood filler, treated with a suitable stain

BY J. CROW TAYLOR

Photograph by Jessie Tarbox Beals

go over it with o grade sand paper, smoothing it off nicely, but not cutting it through. Then apply a second coat and treat it in the same manner.

If you have used your shellac rather thick and heavy, two coats will give body enough. If, however, your shellac has been thinned it may need three coats. Where one desires to avoid spotting with the shellac it is easier to make a

good job of it by thinning it with wood alcohol and applying three coats.

After the top coat of shellac has dried thoroughly, and it is a good idea to wait two or three days for this so that the entire body may harden up well, go over it with sand paper as the others were and smooth it up nicely, using old rags or cloths, clean it off thoroughly and you are ready to wax.

There are a number of floor waxes on the market and you may use that which pleases you. The main point is to get one with "body." Perhaps the best method for applying floor wax is to take cheesecloth and double it to get a little more thickness, then make it into a sort of bag. Put a handful of wax inside of this and with it go over the floor thoroughly. You will find that you can work enough wax through the meshes of the cheesecloth to give a coating evenly all over the floor, and this prevents getting too much wax on in spots and unnecessarily wasting the wax. It should not require a lump of wax larger than an ordinary hen's egg to wax the floor of one good sized room thoroughly. If you think it is too light you can go over it again in a few days.

After the floor has been gone over with the wax and allowed to dry (some wax will dry enough in a few minutes and other wax takes 10 or 12 hours), it is ready to polish. For polishing one should use a weighted brush. There are two sizes of regular floor brushes for this purpose—one of 15 pounds and one of 25 pounds. The 15 pound brush is heavy enough and it is easier to use. Moreover, in case there is not a brush available of the regulation type, one can take soft flannel rags and by patient and persistent rubbing bring out an excellent polish.

The method described above is acknowledged today as being the most approved for finishing a hardwood floor, and to care for it afterward all that is necessary is to go over the spots where there is the most wear every week or two. Places near the doors and near the stairs need special care. Occasionally one can go over the whole floor. After a dance or reception renew the wax or is put on just before and only rub it a little. The idea is to keep just a thin coat of wax and renew it when it wears through. Never permit the shellac to wear. By keeping this up you can retain the beauty of your floor indefinitely. Perhaps

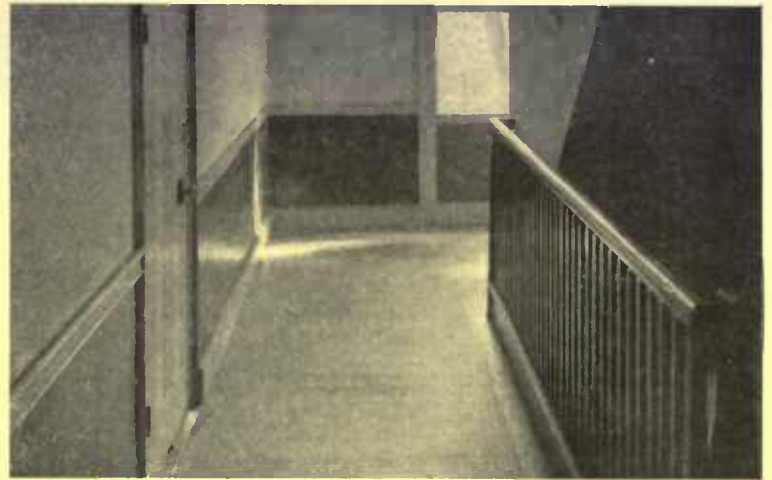
once or twice a year, depending considerably on how much the floor is used, it may accumulate dirt and become soiled so that it cannot be cleaned up with the ordinary rubbing over with a cloth. Then, take benzine or gasoline and a rag, go over the floor and take up the wax. The wax will dissolve in the benzine or gasoline, and you can clean the wax, dirt and all, off thoroughly just as you can mop up the dirt and grease from linoleum with water and a rag. Then, let the floor dry out thoroughly, after which you are ready to wax again.

One should avoid using an ordinary broom on a wax floor, for it scratches. Make a bag of cotton-flannel, or some cloth that will draw over the broom, and use the regular rubbing brush. Or take a soft cloth of any kind and clean off the floor.

There are other methods of finishing hardwood floors, and even though the above is considered the most approved some may prefer one of the others. After staining and putting on the filler, instead of shellac one can use some of the hard floor varnishes of which there are several advertised now. Sand and smooth the first coat, then follow with the second, or thin the first two coats with turpentine and make a three-coat job of it. After applying the top or last coat it may be left in its natural gloss, rubbed down to a dull finish with fine sandpaper, or after being rubbed down to a dull finish given a furniture polish with rotten-stone.

As another alternative, one may put two or three coats of varnish on the floor and smooth it off with sandpaper and finish with wax just as was done when finishing with wax on top of shellac. This gives a higher finish, but it is not considered as good by expert floor people. Hardwood floor men will tell you that if you want a wax floor you should use shellac on it. If you don't want to wax your floor then use varnish.

There is another variation in the matter of finishing that the varnish men will advise you against, but notwithstanding this, it appeals to the writer. That is, no matter just what you use afterward, make your first coat on the floor of shellac. Put on the filler and stain, then a coat of shellac, no matter whether you intend to finish with shellac and wax or whether you intend to apply varnish. The shellac serves to seal in the filler and makes a body or ground work that is good as a starting point for any kind of finish and any kind of finish will stick to it. The practice of the writer in work of this kind is to use a filler and a stain, then a coat of shellac. After that if the floor is to be waxed there come one or two more coats of shellac and then the



Even the old floor yields to this treatment. Smooth off, apply a filler and proceed as directed

wax. If it is to be varnished, the same order is used.

Remember, however, that you cannot reverse the matter; while you can wax on top of varnish or on top of shellac you cannot varnish on top of wax. The varnish will not stick, will not dry out as it should when applied on top of wax. It is possible that if you have wax on a floor that has been shellacked you can take benzine or gasoline and clean it off thoroughly. Let it dry and then get varnish to stick. It is well to remember, however that wax is simply a surfacing and finishing coat, and it may be applied on top of shellac or varnish, but it wears better on shellac.



One can only have good floors by giving them regular attention. One secret of success is to maintain a thin coat of wax, renewing it when it begins to wear through

The Making of a Walled Garden

THE FUNCTION OF A WALL IN RELATION TO THE GARDEN—VARIOUS SUITABLE TYPES AND THEIR MANNER OF CONSTRUCTION—HOW PLANTS ADD TO THEIR ATTRACTIVENESS AND WHAT KINDS TO USE

BY HAROLD DONALDSON EBERLEIN

Photographs by Jessie Tarbox Beals, the author, and others

THE walled garden is no longer regarded as an exotic in America. Here and there architects and their clients have awakened to its attractions and each year more garden walls arise. Possession of a walled garden is not the exclusive prerogative of great estates.

The smallest country place may readily have one, and the question of construction, in many instances, may be considered a problem for "home made" solution. With a little thought and the aid of an intelligent workman the building of the garden walls is a comparatively simple matter. Care and foresight, to be sure, must be exercised in choice of location and exposure and the selection of the kind of wall to build.

Though perhaps there are not the same reasons in America for the walled garden as in England, or parts of Continental Europe, we have quite sufficient cause to regard it with high favor. Since it affords privacy, it provides at once an outdoor living apartment and a place for gathering together the choicest garden things that we would have always nearest us. It shelters the tenderlings of early arrival and more intensive care of the things within its limits is possible. It has too strong a hold on our liking to need an apology for its existence.

In choosing the site for the walled garden the two chief points to consider are exposure and the contour of the land. Where conditions permit it is best to face the garden to the southeast, south or southwest; this exposure will give the plants the full benefit of the spring sun and in summer the prevailing southwest breezes will add to the comfort of sitting there. By laying out the garden so that a stretch of timber, a hillside or the house and outbuildings make the northern boundary you may oppose an effective barrier to the biting blasts of winter. The more protection your garden has on the north, northwest and northeast the better; earlier blooms will result. When the situation does not admit of such a plan, the northern wall should be carried out to a greater

height than the other walls and, if practicable, a windbreak of trees planted beyond it. There is no reason why the walls should be of uniform height; diversity is rather pleasing than otherwise.

If it be possible so to place the garden as to have running water the opportunity should not be neglected; to secure this feature it is even worth while to make some sacrifices. The presence of water will make many pleasant things possible. It may be utilized for a foundation or, if there is sufficient slope, for a succession of foundations by piping the overflow from one to another lower down and so on. The matter of proper drainage must also be taken into account.

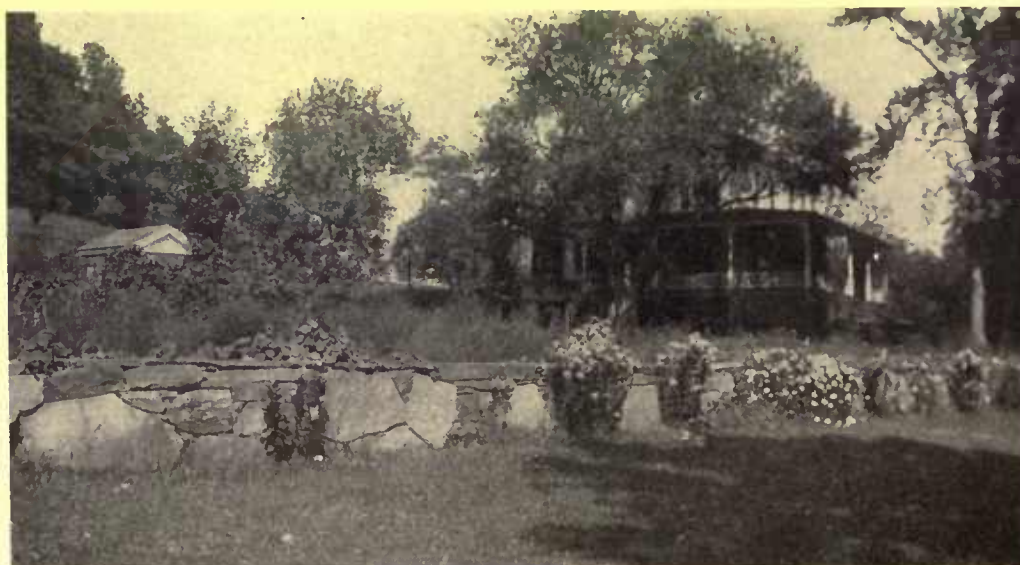
Having determined the location, shape and size of the garden, the next thing to settle is the kind of walls to have. Other things being equal, it is always a wise principle economically to select building material from the source most readily available. From the aesthetic point of view, too, it is generally true that the material provided by Nature ready at hand will conduce to sincerity of feeling and harmony with the surroundings. Sundry causes, however, may make it advisable in certain cases to set aside this principle.

If brick be decided, upon the variety will naturally be the same as that used in the house and other buildings on the place. Rough-textured bricks, however, will be best as they give support to climbing plants and vines and reflect the sun's rays less fiercely. This may seem a trifling matter but it is not. In our climate it is of the first importance that garden walls exposed to the summer sun for any considerable portion of the day be covered with growths of

some sort; otherwise the plants within the zone of reflection will be withered and scorched. The foundation may be of rough rubble or of concrete and should go at least two feet below the surface of the ground. A greater depth is preferable, for it is better to err on the side of precaution than to have mishaps. No structure is satisfactory that cannot defy all con-



The dry wall is a great deal more effective if irregularly laid



A type of dry wall with finished side that is not fitted for crevice planting. Flowers at its base appear attractive, however



In the cracks and holes of a rough wall, creeping plants take hold and grow vigorously



The concrete wall should be of rough surface and is made attractive by vines and shrubs

ditions of climate and weather. Build the wall thick enough to be substantial and look well to the coping which, whether it be of stone, concrete, specially moulded brick or other material, should be, before all else, water tight so that no moisture may get inside the wall and start disintegration.

A concrete wall should have concrete foundations. Where buttresses or pilasters occur between panels staunch foundations should be provided at least two feet in depth. Under the rest of the wall the foundations need not be as deep, perhaps, because of the monolithic character of the material, but it will not be amiss to make them of unquestionable stability and proof against inroads of frost or burrowing moles. Above ground the surface of the concrete should be finished rough-cast for the same reasons mentioned in the case of brick walls. If you wish to train fruit

trees or shrubs against the walls the *espaliers* should be made of bamboo or some sort of light woodwork and set far enough out (two or three inches) to prevent the bark from rubbing against the wall surface. Moreover, if the branches press too closely against the brick, concrete or stone, insects are very apt to find a harboring place there.

When we come to stone we can choose between walls built with mortar and those of dry construction (without mortar) and it must be said that frequently the latter seem preferable. The general appearance of the masonry in a mortar built wall is a matter of taste to be settled by the owner and cannot be discussed here further than to enter a protest against the rejection of stones for irregularity of color often the one feature which gives life and warmth to the whole fabric. There ought to be enough Portland cement in the mortar to prevent any softening or disintegration from the effects of the weather or the pull of vine tentacles. Mortar composed mostly of gravel with very little lime, such as is sometimes used in walls, is thoroughly unsatisfactory; it soon falls out and the wall disintegrates. The same general advice about substantial foundations applies here as well as elsewhere, and it is easy to obtain this without losing character in the wall.

To the dry stone wall belongs a charm denied all others. In the crevices between the stones all manner of rock plants will grow and many that ordinarily are not considered rock plants will grow there too. The whole wall surface may be instinct with life and completely covered with foliage and blooms, and even in winter it need not be bare. It can readily be seen how appropriate is such a wall for a garden enclosure.

A dry stone wall filled with rock plants is effective not only in gardens but for any terrace work. The stones should be set far enough apart to admit of inserting plants and sufficient soil must be put in the crevices for them to grow in. Retaining walls of dry



If water may be piped to a basin in the wall, ferns and mosses grow luxuriantly and make a most interesting garden feature



Where the wall is used for retaining purposes, the lower stones should be laid at right angles to its length



Everlasting, rock cress and bearberry are some of the plants which are so successful in covering this wall

stone construction, where the moisture can penetrate the interstices from the supported bank, are still more successful as a base for planting than mere enclosing walls, which need more care and water, though even then the satisfaction gained is worth the trouble. The lines of earth connection in a retaining wall should be continuous from the bank so that moisture may work through and the plants be not wholly dependent on water from outside. The stones in a dry wall should be slightly tilted where the wall stands independently. This may be done by means of small wedged shaped stones. In this manner rain will trickle through the crevices.

Fall is the most suitable time for building dry stone walls. Then everything has a chance to get settled in place before winter. The condition of the ground and the delay in planting makes spring wall-building unsatisfactory. A properly constructed dry wall is proof against injury from the weather and when it retains a bank no frost action can make it bulge. The best foundation for such a wall, whether it be meant to support a terrace or merely to enclose, is made of concrete. For a retaining wall the depth and breadth of foundations must be determined by the requirements of the particular instance, in some cases where a steep and high hillside is to be kept in place a depth of $3\frac{1}{2}$ or 4 feet and a breadth of 5 feet being necessary. Ordinarily, however, a depth of 2 to $2\frac{1}{2}$ feet will be enough.

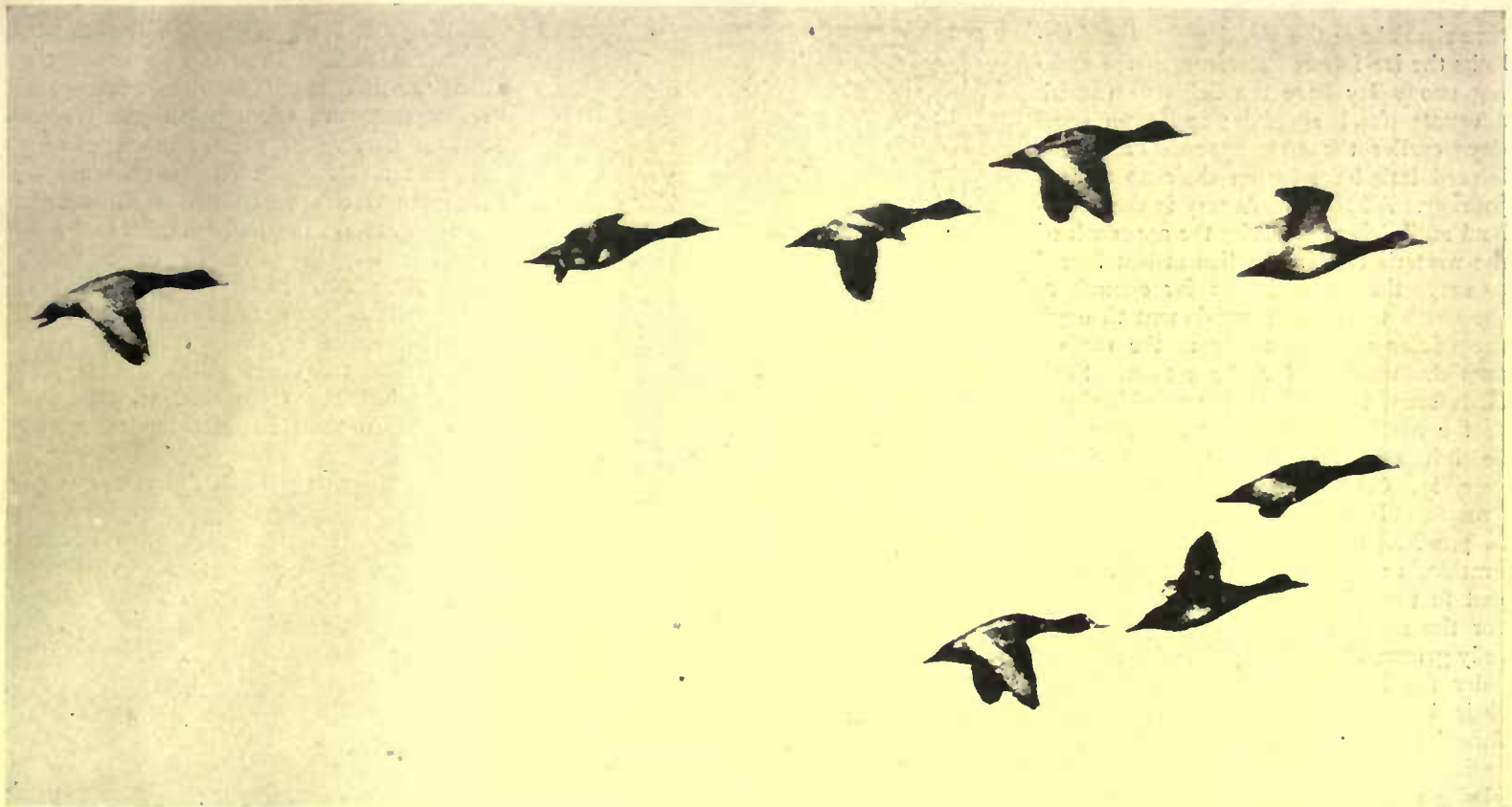
For building the part of the wall above ground it may be found better to employ intelligent laborers under the direction of a competent person rather than skilled masons. It is often difficult to persuade the latter, with their desire to do a "good job," to refrain from "dressing" the stone. Do not let them "trim things up." Make them put their hammers by, and, if one stone will not fit, get another. If the stones are "trimmed" the charm of the wall will be gone and it will look prim. Almost

any kind of field stone or rough stone from a quarry can be used as long as it is properly laid in place. Few will deny the beauty of the old rough boulder walls between New England fields. In a retaining wall, which must be thick enough at the base (sometimes 3, 4 or even 5 feet) to sustain the thrust of the bank above, the large stones at the ground line, resting immediately upon the foundation, should be laid with their length at right angles to the line of the wall and their inclination nearly at right angles to the batter of the wall. This will keep the earth from washing out. Toward the top the breadth lessens greatly.

Whether the wall be a dry one or of mortared joints, the question of soil is important. In the former case a mixture of loam
(Continued on page 338)



Where the garden wall is of brick, it is best of rough surface. Put the lattice work a few inches from the surface to prevent the accumulation of dirt and insects



The ducks and geese are day migrants, flying seldom more than an hour at a time, passing from one well-known feeding stop to another

The Migrations of the Birds

ONE OF THE MOST FASCINATING BRANCHES OF NATURE STUDY—WHICH BIRDS MIGRATE AND WHY—HOW FAR THEY TRAVEL AND HOW FAST

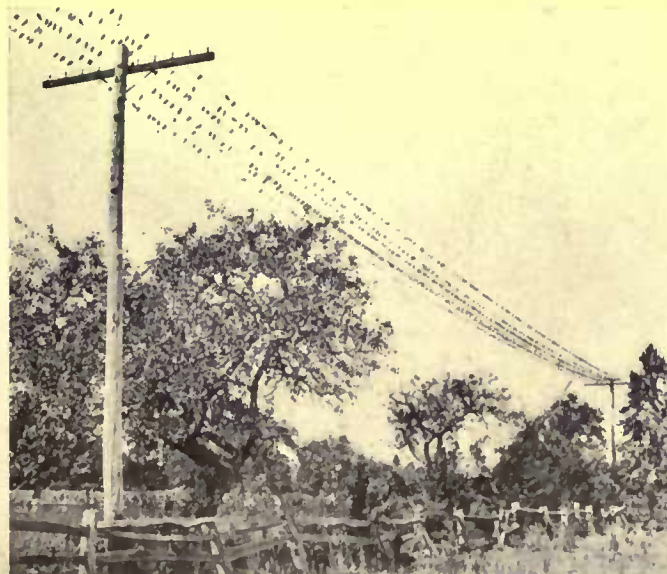
BY WELLS W. COOKE

BIOLOGICAL SURVEY, UNITED STATES DEPARTMENT OF AGRICULTURE

Photographs by A. R. Dugmore, Scott & Van Altena and Julian A. Dimock

THE mystery of bird migration has proved a fascinating subject from the earliest times. The birds were noticed to disappear in the fall and reappear in the spring, and not knowing where the intervening season had been spent many fanciful theories were advanced of hibernation in trees or in the mud, and stories were current of whole flocks seen to disappear beneath the waves of the Mediterranean to winter in its depths. With the later years has come a fuller knowledge of the particular region in which each species passes the cold season and more definite information in regard to the routes employed in the spring and fall journeys. But the increase of knowledge has not lessened the interest in the general subject. More persons today are watching the birds and noting their times of arrival and departure than ever before. Indeed, the Biological Survey has received migration notes from more than

two thousand different persons, showing how widespread has become the late development of nature study.



One of the great migration mysteries is the destination of the chimney swift, traced until he reaches the northern coast of the Gulf of Mexico, to which he returns five months later from no one knows where

The ever recurring question of why do birds migrate arises at once in the mind of every student of bird movements. No definite and complete answer has been or can be given to this question. It can be stated, however, that some advantage must accrue to the individual or the species as a result of the long journeys or else they would long ago have been abandoned or curtailed. Birds are not instruments of fate; they can and do change their breeding areas and modify their migration routes correspondingly. Yet two classes of migratory movements can be distinguished. In the one the bird seems eager to migrate. Examples of this are to be found among the geese and ducks, the robin, flicker and some of the black birds. All these birds press forward in the spring as soon as the tempera-

ture rises above the freezing point and unlocks the ice-fettered streams, or the melting snows lay bare the fields to furnish adequate food supplies; and even some days earlier the tree sparrow and the horned lark have begun their northward journey. All these birds stay in the north-land until driven south by the approach of the winter's cold, and when at last forced to move they retreat only far enough to the south to obtain nourishment through the winter and are ready at the earliest possible moment for the return. Such birds seem to consider the neighborhood of the nesting site as their real home, to be left with regret and to be revisited speedily. On the other hand, a still larger group of birds remain in the south as long as possible, make a late and hurried migration, arrive at the breeding grounds just in time for nest-building and depart for the south as soon as the young are fully grown. One would judge them to consider the land of their winter choice as their home, which they are reluctantly forced to leave by the exigencies of the period of procreation and to which they gladly return. This latter class includes more than half of our migratory birds—the warblers, vireos, thrushes, flycatchers, orioles, tanagers, swallows and such of the sparrows as winter south of the United States. Many an orchard oriole arriving in southern Pennsylvania the first week in May, leaves there by the middle of July, thus spending only two and a half months out of the twelve at the nesting site, while robins can be found in the same locality from March to November, being absent less than a third of the year.

Nothing can be more variable than the distance travelled by birds in their migrations. A few birds, like the grouse, quail, cardinal and Carolina wren are non-migratory. Many a Carolina wren rounds out the full period of its existence without ever going ten miles from the nest where it was hatched. Some other species migrate so short a distance that the movement is scarcely noticeable. Thus meadow-larks are found near New York City



The longest single flight made by any bird is that of the golden plover from Nova Scotia to South America

even to Patagonia. Among these long distance migrants are some of our commonest birds; the scarlet tanager migrates from Canada to Peru; the bobolinks that nest in New England probably winter in Brazil in company with the purple martins, cliff swallows, barn swallows, nighthawks and some of the thrushes who are their companions both summer and winter. The black-poll warblers that nest in Alaska, winter in northern South America at least 5,000 miles from the summer home. The land-bird with the longest migration route is probably the nighthawk, which occurs north to Yukon and south to Argentina, the two countries being 7,000 miles apart. But even these distances are surpassed by some of the waterbirds and notably by some of the shorebirds which, as a family, have the longest migration routes of all birds. Nineteen species of shore birds breed north of the Arctic Circle, every one of which visits South America in winter and six of which penetrate to Patagonia, a migration route more than 8,000 miles in length. The champion migrant of the world is the Arctic tern; it nests on the most northern shores of the Arctic Ocean as far north as it can find anything stable on which to construct its nest and it winters along the ice pack in the Antarctic as far south as it can find open water and food. The two extremes of its migration route are fully 11,000 miles apart or a 22,000 mile round trip each year.



The nighthawk has the longest migration route of the land birds, traveling each year north to Yukon and south 7,000 miles to Argentina

all the year, but it is probable that the individuals nesting in that region move a little farther south for the winter and their places are taken by migrants from farther north. Or part of a species may migrate and the rest remain stationary—the pine warblers of the Gulf States are non-migratory, but their numbers in winter are largely increased by migrants from the north. In the case of the Maryland yellow-throat, the breeding birds of Florida, are strictly resident, while spring and fall other yellow-throats pass through Florida from their winter home in Cuba to their summer home in New England.

Most migratory birds desert the entire region occupied in the summer for some other distinct region they have adopted as their winter home. These two homes are very variable distances apart. Many species from Canada winter in the United States, others nesting in the northern United States winter in the Gulf States, while more than a hundred species leave this country for the winter and spend that season in Central or even in South America. Nor are they content with journeying to northern South America, but many cross the equator and pass on to the pampas of Argentina and a few to Patagonia. Among these long distance migrants are some of our commonest birds; the scarlet tanager migrates from Canada to Peru; the bobolinks that nest in New England probably winter in Brazil in company with the purple martins, cliff swallows, barn swallows, nighthawks and some of the thrushes who are their companions both summer and winter. The black-poll warblers that nest in Alaska, winter in northern South America at least 5,000 miles from the summer home. The land-bird with the longest migration route is probably the nighthawk, which occurs north to Yukon and south to Argentina, the two countries being 7,000 miles apart. But even these distances are surpassed by some of the waterbirds and notably by some of the shorebirds which, as a family, have the longest migration routes of all birds. Nineteen species of shore birds breed north of the Arctic Circle, every one of which visits South America in winter and six of which penetrate to Patagonia, a migration route more than 8,000 miles in length. The champion migrant of the world is the Arctic tern; it nests on the most northern shores of the Arctic Ocean as far north as it can find anything stable on which to construct its nest and it winters along the ice pack in the Antarctic as far south as it can find open water and food. The two extremes of its migration route are fully 11,000 miles apart or a 22,000 mile round trip each year. More wonderful, however, than the total distance the bird migrates in the year, is the enormous distance traveled at a single flight.

When birds are migrating over land they fly a short distance—an hour or so at a time—and then stop and rest and feed for a day or several days before they undertake the next stage of their journey. But when they come to a stretch of water, as for instance when birds in fall migration reach the northern coast of the Gulf of Mexico, they make the entire trip across the Gulf from Louisiana to Yucatan at a single flight in a single night between darkness and daylight. Moreover, they do not seem to attempt to shorten the flight as could easily be done by passing to the west through Texas or to the

east by way of Florida, but thousands of them cross the Gulf at its widest point. Strangest of all, they do not seem to be exhausted by these long flights, but often fly a hundred miles over the land on the other side before they alight. Indeed, it is certain that their energies are not severely taxed by these flights or they would not undertake them, since, as just remarked, there is no necessity of their making these long flights if they were not preferred. These long flights are made by many of the smaller birds and even by the hummingbird, the smallest of all, which spring and fall makes the flight of more than 500 miles between the coast of northwestern Florida and the Mexican coast.

These distances seem great, but they are small compared with the distances flown by some of the water birds to whom a thousand-mile trip is an easy journey. The longest single flight of any bird in the world is made by the golden plover from Nova Scotia directly south across the Atlantic Ocean to the coast of northeastern South America. In fair weather this whole stretch of about 2,500 miles is made without a stop and probably requires nearly if not the whole of twice twenty-four hours for the trip. Here is an aerial machine that is far more economical of fuel than the best aeroplane yet invented. The to and fro motion of the bird's wing would seem to be an uneconomical way of applying power, since all the force required to bring the wing forward for the commencement of the stroke is not only wasted, but is more than wasted, for it largely increases the air friction and retards the speed, while the screw propeller of the aeroplane has no lost motion. Yet less than two ounces of fuel in the shape of body fat suffices to force the bird at a high rate of speed over that 2,500 mile course. A thousand pound aeroplane to be as economical would have to fly 20 miles on the force from a single pint of gasoline.

Some birds migrate by day and others by night. Day migrants include the ducks and geese, the hawks and such birds as the gulls, swallows and nighthawks that are endowed with exceptional aerial powers. The



A flock of white ibis. Greek and Roman writers give many fabulous stories regarding this bird, arising from the fact that the sacred ibis arrives in Egypt coincidentally with the inundation of the Nile

larger part of the small birds migrate at night for the sake of greater safety from the attacks of birds of prey. The night's flight is begun soon after dark and usually lasts only a few hours. Night migrants stop to feed during the day time; ducks and geese seldom fly more than an hour at a time, merely passing from one well known feeding spot to another, while the gulls, swallows and nighthawks catch their food while on the wing during migration.

How do migrating birds find their way? They do not journey haphazard, for the familiar inhabitants of our dooryard martin boxes will return next year to these same boxes, though meanwhile they have visited Brazil. If the entire distance was made over land, it might be supposed that sight and memory were the only factors used in the problem. But for those birds that cross the Gulf of Mexico, and still more so for the golden plover and its Atlantic Ocean crossing brethren, something more than sight is necessary. The best explanation seems to be that birds have a "sense of direction," such as we know ourselves to possess, only in the case of the bird it is vastly more acute than with us. Sometimes, however, the birds are caught by storms of such severity that their sense of direction fails them and then they become the prey of the lighthouses scattered along the coast. Tempest tossed and bewildered, they seem to be fascinated by the lantern rays piercing the darkness and hurl themselves to death against the glass. A red light or one that flashes is avoided, but a steady white light like that of Sombrero Key Light in southern Florida proves irresistible. As long as the light shone in the Statue of Liberty in New York Harbor many hundred birds were killed by it each year. Nor are the lighthouses the only peril to the migrant. Many a flock while crossing the Gulf or the Ocean is overtaken by storms and buffeted until with strength exhausted it sinks into a watery grave. Even the comparatively short trip across the Great Lakes has proved disastrous

(Continued on page 331)



A great many birds, among them the tiny hummingbird, fly 500 miles across the Gulf of Mexico without difficulty

The Case for Hot Water Heating

THE REAL FACTS URGED IN FAVOR OF THE HOT WATER SYSTEM—COMPARISON WITH OTHER METHODS ALONG THE LINES OF SERVICE, COST, ECONOMY AND OTHER ADVANTAGES

BY JAMES A. HARDING

Editor's Note.—"What heating system shall I use?" is the constant query of the home-builder. To assist in solving his difficulty, *HOUSE & GARDEN* has had experts in heating engineering present the advantages of their own favorite types of apparatus. For the first time the whole case of the best heating method will be presented to the public as a jury. This article will be followed by others presenting the characteristics and advantages of steam, hot air, and the indirect system.

ANY demonstration of the advantages of hot-water heating necessitates frequent comparisons of the three best known types of heating apparatus, viz.: hot-water, steam and hot-air, and a word as to ventilation seems appropriate, as in the modern scheme of physical life ventilation has become the hand-maiden of heating and is almost as important as the question of heat itself.

Special provision for the ventilation of all the rooms in a dwelling such as has latterly been advocated in connection with hot-air furnace heating is prohibitive in a large majority of houses because of its excessive cost. Such provision is more in the nature of a boosting appliance to insure the successful operation of the hot-air furnace (which mostly fails to deliver heat to unventilated rooms) than it is a necessity or boon to the dwellers in the house.

It is now the almost universal custom of well informed people to leave one or more windows in their bed chamber open during the night, which excellent practice entirely obviates the need of artificial ventilation through pipes or flues, as regards at least one-half the interior space of the house.

In a house of ten rooms occupied by a family of six adults, for example, with a proper allowance for the incidental leakage or ingress of fresh air, which is considerable in the best built house, not more than five thousand cubic feet of fresh, artificially warmed air per hour need be provided for.

The necessity for burning an excessive amount of coal to warm more fresh air than health and comfort demand, because the supply of heat from a hot-air furnace can be carried to the rooms only by the medium of this excessive air supply, becomes at once the Waterloo of that type of heating apparatus.

The custom of connecting a return air pipe from a large register in the hall to the hot-air furnace, in the interest of economy of fuel, is pernicious from a hygienic standpoint. The health and physical comfort of people in the house during their waking hours depend upon a reasonably constant temperature, imparted

to the air by heating (radiating) surfaces at such a low temperature as to act moderately and constantly upon the air in contact with them. The unpleasant and unhealthful odors from minute particles of organic matter, always present in the air indoors, and made apparent by contact with the high temperature hot-air furnace and steam radiator, are thus avoided. A radiator should never be hotter than 170° F., even in zero weather.

The intermittent "going down" of the pressure in a steam heating apparatus, the consequent condensation of steam in the radiator and pipes and filling of these spaces with air, results in a rapid fall of temperature in the rooms. Upon the recurrence of pressure, a discharge into the rooms of a volume of foul, odoriferous air from the air valves takes place, sometimes with an accompaniment of noise, as the steam, water of condensation and air agitate the radiator. To add to these, the rooms are often overheated.

The modern hot-water heating apparatus maintains a steady, noiseless and positive circulation throughout, with moderate temperatures of the radiating surfaces.

In the earlier history of hot-water heating (as far back as 1840) the water was heated under

pressure to high temperatures, and that method is followed to some extent at the present time in the interest of reducing the size and first cost of the apparatus; but it has been conclusively proven by physicians and others, that the "open tank" hot-water system chiefly in vogue today, with its lower temperature of radiators, is infinitely superior from the standpoint of health.

The flexibility of a heating apparatus in successfully meeting changes in weather conditions is an important consideration in the interest of comfort.

While steam and hot-water systems are equally positive in the delivery of heat to the points of use, the former requires a certain constant condition of the fire in order to generate steam



Radiator enamel is now obtainable to match any color of woodwork or wall-covering. The radiator here is less obtrusive as it fits in with the paper's coloring and striped pattern

from atmospheric pressure to two pounds gauge pressure.

The temperatures of the radiators in ordinary systems of steam heating will range from 212° to 220° , whereas the atmospheric conditions prevailing out of doors may vary from 50° F. to 10° below zero.

With hot-water heating the temperature of the radiators may be maintained at any degree from say 80° to considerably above 200° if necessary.

Again, after the fire has been banked or otherwise regulated for the night, there is a constant supply of heat from the fire to the radiators, so that in the morning the temperature of the water will be within 10° to 20° or so of that required for maintaining the desired 70° in the house.

In the steam heater after the fire is banked at night, the steam pressure goes down and the house cools off to a low temperature. In reply to them, it is urged that it is possible to get up the temperature quickly with steam heat. While this is true, it is of negative advantage in comparison with the greater one of having a constant temperature which obviates the need of forcing the apparatus, and the consequent waste of fuel which continues while the heater is operated under forced or excessive draught.

In vapor or vacuum systems of heating the variable temperatures of the radiators possible, constitute a valuable claim to superiority in the interest of comfort and economy. If such systems were designed to employ as large radiating surfaces as in modern hot-water heating and not to depend upon steam at high temperatures during excessively cold weather, then such systems would approach the excellence of hot-water heating:—provided, of course, that the vacuum necessary to produce vapor of a wide range of temperatures were not dependent upon the intermittent action of an automatic device, nor the positive action of an expensive mechanical or electrical device.

As to the hot-air furnace system of heating it is urged, and with apparent reason, that the hot-air furnace supplies fresh air to the house through its cold-air box and hot-air pipes, while direct radiator systems of heating do not supply fresh out-door air.

When, as stated above, a limited volume of air only is required for a family of ordinary size in order to maintain a given standard of purity throughout the house, it will be seen that this can be obtained by means of one or two indirect hot-water radiators furnishing fresh out-door air to the halls or principal living rooms of the house, thus providing heat and ventilation at once.



Almost every corner of the room may be especially provided for from the hundred designs of the modern radiator

The hot-water radiator obtains its heat from the source of supply, the heater, unhampered by effect of wind; whereas, as is well known, with furnace heating, rooms exposed to pressure of prevailing cold winds do not obtain warm air through the furnace pipes.

Again, with the hot-air furnace the air passes over its iron (usually cast iron) surfaces and takes up in this passage, coal gas and particles of dust, such as moulding sand and accumu-

lated deposits from the street; which impurities more than counterbalance the advantage to be derived from the air, originally fresh then entering the furnace, but which reaches the rooms considerably impaired.

In the matter of leakage of coal gas from the interior of a hot-air furnace into the fresh air passages immediately surrounding it and communicating with the rooms through pipes, the reasons for it are easily comprehended

when the physics of furnace construction are understood. A cheaply-constructed furnace is extremely pernicious in its insidious promotion of ill-health and it would seem that if civic authority were as wide awake in the enforcement of ordinances for the exclusion of coal gas from our homes as they are in the matter of sewer gas, then the cheap hot-air furnace would be driven out of existence.

With the hot-air furnace the temperatures of its several parts when in operation will frequently vary through a range from 1000° F. to 200° F. This inherent condition renders it necessary not only to build the furnace in sections, but to assemble its several parts with unsealed elastic joints, so that inequalities of expansion and contraction will not cause a fracture. In the combustion of coal the force of air entering the draught-doors and the expansion of gases in the furnace create an internal pressure with every charge of fuel which will overcome the resistance of the joints in the best made furnace.

It will be of interest to note the reasons why hot-water heating is more economical than the other types, and in considering these reasons it should be borne in mind that comparisons are here made between systems which embody all features necessary to express the highest standard of each type.

It is convenient to base comparisons upon concrete examples, and a country house of ten rooms will afford an average basis of calculation.

A hot-water heating apparatus for such a house should cost approximately \$475.

The interest on this amount per year at six per cent. is \$28.50. Such an apparatus will require about nine tons of coal for the season which at six dollars per ton makes a total of \$54.00 per year for fuel, and a total annual expense of \$82.50.

A steam-heating apparatus for the same house will cost about \$375, and the interest on this amount will be \$22.50. This apparatus will require about twelve tons of coal at a cost of \$72.00.

In steam-heating the fluctuations of pressure occasion alternate rapid expansion and contraction of the pipes and other parts at frequent intervals, which promote leaks. Radiator valves should be repacked at least once a year. Automatic air valves are prolific sources of trouble and expense. Damper regulators need repairing and the alternate filling of the system with steam and air promote the rapid oxidation or rusting of the interior of pipes and radiators, and their gradual disintegration.

(Continued on page 335)



The window-seat is only one of the means whereby a radiator may be placed almost entirely out of sight



Starting with a viewpoint commanding the foothills and Adirondacks beyond, the garden worked itself out as a long central path, flanked by poplar trees, hardy borders and strips of lawn

A Garden in the Foothills of the Adirondacks

BY MARY LLEWELLYN GIBSON

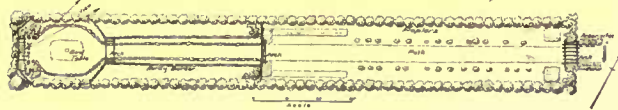
Photographs by the Author

WHEN I decided to evolve a garden I was so well imbued with William Morris's sense of art from my winter's reading that I selected a field from which the view of the hills, on and on, to the Adirondacks seemed to fulfil what he felt to be a situation for a garden. To him a garden was not a shut-in place but a retreat, from which as one looked abroad the vista gave promises and thoughts suggestive of hope, ever reaching on beyond. That appealed to me, so at this viewpoint I built my seat, a large rustic affair with projecting screens of cedar posts about seven feet high. As a background I transplanted four very large bushes of pink honeysuckle from the woods.

From that my plan grew. I decided to make a straight path down the center a distance of one hundred and eighty feet, with a lawn on either side about ten feet wide and a hedge as an outside line. The hedge question was most puzzling, as in perspective any ordinary hedge plant at such a distance, at least the size I could afford to buy, looked about the size of a geranium. Being an American, of course I had to have an immediate effect, so I decided on trees—Carolina poplars. They grow so rapidly, and then the summer wind when it gently blows their willing leaves has always been to me such a delightful sound. I put them in, the following spring, fifty on a side, about three feet apart.



Rustic arches helped the vista down the long path, and an edging of field stones bounded the hardy border and kept the garden from washing out



The garden is a tree-bordered rectangle 25 x 180 ft.



A bird table is the center of interest near the sheltered seat at the viewpoint

I knew unusual difficulties confronted me, as this potato patch that I had chosen was composed of clay soil and I could have no water supply. I prepared my borders, which were seventy feet long on each side, by digging down three feet and filling in with compost. As simplicity, I felt, must guide me in all I did, I decided it would be effective to edge the borders with field stones, which I proceeded to collect, selecting the most irregular shapes. They not only made an edging but kept the spring rains from washing away the hill.

I could see as my garden grew that I must break that long plain look to the path. I built three different arches of rustic cedar over the path, and at the end where I put the seat I built a bird table and planted trumpet vine around it. On this I keep a pan of water, which seems to attract the birds particularly well in our country. The beds around the bird table are filled in with clove pinks and white phlox. In spite of the rustic arches the path still lacked something to me. It was too symmetrical for an informal garden—it had no atmosphere. It was not until I saw one day in front of a hardware store, an English crate for dishes, a big affair of slender branches with the bark on, that I saw fences and backgrounds galore. I immediately bargained for that one at fifty

(Continued on page 333)



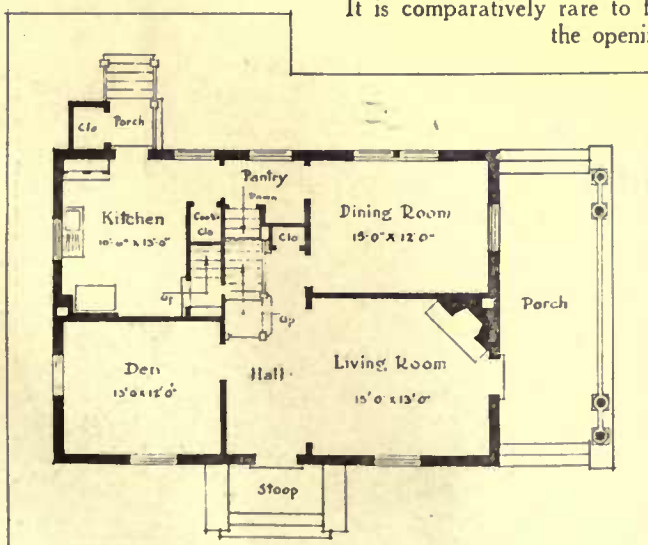
It is interesting to note the ingenuity with which the architect has kept this comparatively small and high house in good proportion by the deep overhang of the eaves on the gables as well as in front and rear

THE HOME
OF
MR. R. S.
MACNAMEE,
BERWYN, PA.

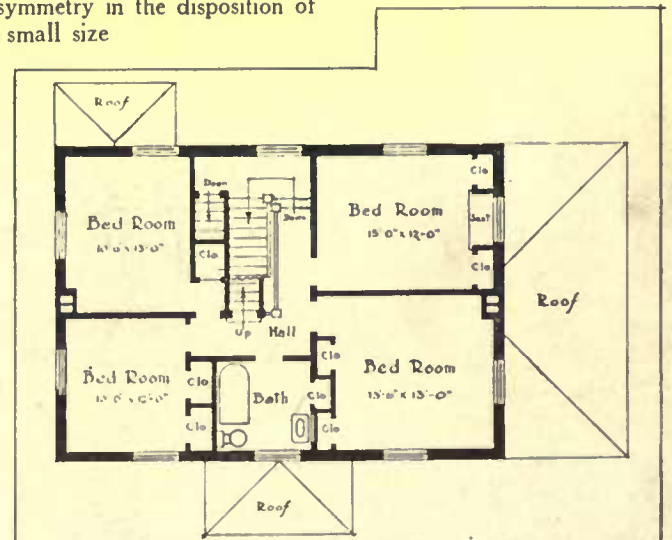


David
Knickerbacker
Boyd,
architect

It is comparatively rare to find such pronounced symmetry in the disposition of the openings in a house of this small size



By opening up the front end of the hall, the working area of the living-room has been largely increased



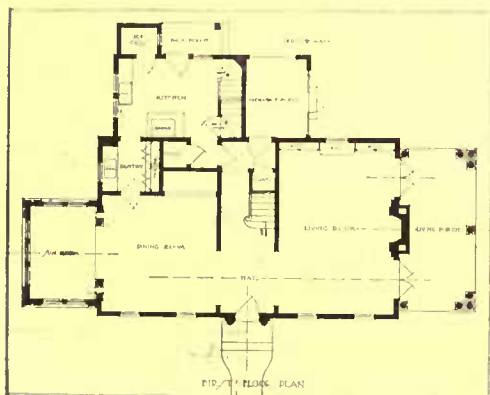
The back stairway, leading directly out of the kitchen, joins the main stairway on an upper landing



Mr. Bush's home is a modification of the Colonial style with white clapboards and solid green shutters. The evergreens in the window-boxes carry out still further the contrasting effect of green and white

THE HOME OF
MR. C. H. BUSH,
CRANFORD, N. J.

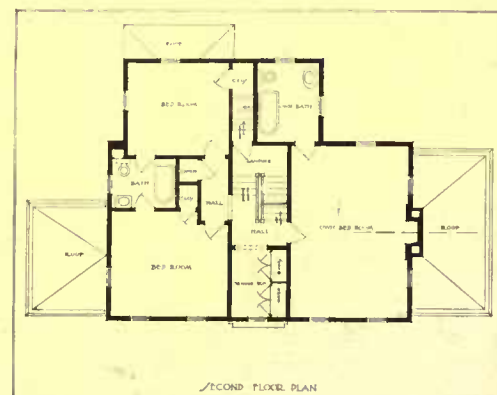
*Hollingsworth & Bragdon,
architects*



The large living-room is practically part of the porch when French doors are opened



The entrance doorway flanked with green lattice is suggestive of old Salem doorways



The owner's bedroom is unusually large and extends across the whole depth of the house



The dining-room is made cheery by the sun room, which opens out from one end of it



The breakfast porch is screened in lattice and will be vine covered, making a delightful room in summer days



The original of "Graycroft" was an ugly square barn of concrete blocks



The living-room was made to extend across the whole width of the barn and is lighted by seven windows



Over the cement blocks wood lath and stucco were applied



The living-room opens upon a living porch, which is screened in. This was an addition to the original structure



The house sits up on a hill among the trees, and with its gray stucco walls blends beautifully into the surroundings



An especially attractive feature of the living-room is the wide fireplace with its inglenook and raised brick hearth



"Graycroft" is simply another exemplification of the great possibilities of remodeling. Formerly a hideous cement-block barn, it is now a most attractive home, and made so at a cost of but \$6,000

THE HOME OF MR. S. J. LATHROP, WYOMING, N. J. *Howell & Thomas, architects*



Inside the House

Timely Suggestions and
Answers to Correspondents



The Editor will gladly answer queries pertaining to individual problems of interior decoration and furnishing. When an immediate reply is desired, please enclose a self-addressed stamped envelope.

A Candle Lamp

A NEW candle lamp that seems to have been evolved from a combination of a lantern and the old-fashioned candlestick with a windshield, is a novelty that is decidedly practical and will no doubt prove useful. The frame is of dull burnished copper with a cylindrical glass shield extending from top to bottom. Perforations in the base and also in the top give free circulation of air, while the candle is so thoroughly protected by the shield, that it burns with a steady flame.

A substantial handle not only adds to the appearance of the lamp, but makes it particularly easy to carry about. It is quite suitable for indoor or outdoor use, and for country houses with neither gas nor electricity it is especially serviceable, as it not only gives a low, steady light for the hall or veranda, but is readily moved about from place to place, and besides seeing that candles are always available it is no trouble to keep in order.

Finishing Floors at Slight Cost.

IN country houses when cleaning in the fall, preparatory to comfortable living in the winter, if one would take the trouble to finish the floor for rugs (which can readily be made from the carpets) the appearance of the home would be greatly improved as well as the labor of keeping clean lessened.

First fill the cracks, if large, with pieces of wood, or if they are not wide enough for that, fill with pieces of newspaper torn to bits and mixed with a paste made of flour and water. Then apply a flat, ground, color and when dry, put on a coat of walnut varnish. If there is much walking to be done in certain places, it will pay after letting the varnish dry, to put on a coat of shellac, or elastic finish. This gives a splendid looking floor, one that wears well and costs little. A finish of this kind for two feet and a half around the baseboard of a room works wonders in the cleanliness and appearance. Be sure to let the ground color dry for at least twelve hours before applying the walnut varnish. It then gives the color of a hardwood floor, neither too dark nor too light, and can stand nearly as much wear.

Protection Against Ice in Gutters

SOMETIMES much damage is done by leaks in the roof, when the gutters freeze in winter. I visited a house where such an emergency was provided for by a hot water pipe leading to the gutters. Whenever a sudden freeze followed a day or two of warm weather which melted the snow on the roof, the hot water was turned into the gutters and speedily cleared them of ice. I believe this device was invented by the owner of the house, but it is not patented and anybody is free to adopt it.

Laying Matting

TO lay straw matting is a difficult thing to do, as the cheaper grades are likely to get wrinkled and to wear in ridges. When you put the matting down, get it as smooth as possible; then with a pail of hot water, to which a cupful of common salt has been added, mop and wash the

matting as if it were dirty. Use the salt water freely, renewing often enough to keep it hot. Wash with the grain of the matting, and leave it quite damp. The salt toughens the straw and prevents it from breaking.

The Desirable Medicine Cabinet

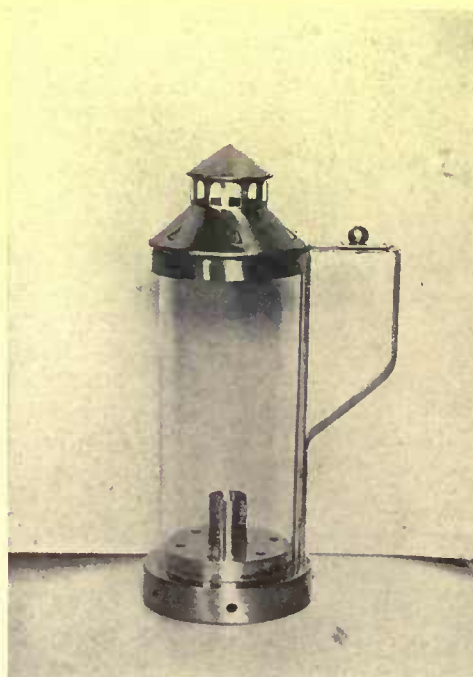
THE sanitary value of a metal medicine cabinet is beyond question. No absorbent material comes into contact with spilled medicine—the metal may easily be cleaned with soap and water, and dried immediately. And metal does not swell, warp, shrink, crack nor sag, as wood is apt to do.

These cabinets are most satisfactory when set into a recess in the wall, but may also be attached to the wall-face with screws. In purchasing it is well to procure the model with moveable shelves, to accommodate bottles of different sizes. And the good housekeeper will find that glass shelves are obviously most desirable. The cabinets are all made with bevelled mirror on the door. Some of them have the inside corners rounded, with no place for dirt to accumulate. The cabinet is attached to the recess without injury to marble or tile-work, and without showing the holding screws.

Small Water Pitchers for the Guest Room

LITTLE pitchers which are of use in the guest room come in various pretty designs in pink, green, blue and yellow. I have one for each guest room, pink for the pink room, blue for the blue room, and so on. They stand on a table in the upper hall, and when we retire for the night a large pitcher of ice-water is carried upstairs, each small pitcher filled, and put in its respective room. Each pitcher holds just two glasses of water which, unless one spends a very wakeful night, is quite sufficient for one's needs.

These pitchers are made of a very good quality of china, smooth and thin and for a wonder they can be purchased at the ten-cent store. The shapes are most convenient—the opening is large enough to admit the whole hand in washing, so that



A combination candle lamp and lantern in brass offers a various service both indoors and out



These three little water pitchers come in different colors and designs and make a good addition to the guest-room equipment

they can be kept clean very easily, which is not always the case with small pitchers. It is most difficult in washing a pitcher with a small opening to reach the cracks and crevices, many or few according to the simplicity or ornateness of the design. The best of drinking water contains a little sediment which settles in these crevices and stays there unless they can be easily reached with the dish-cloth.

A set of these little pitchers, one for each sleeping room, will be found to be a dainty and most useful accessory to your household appointments.

Two Well Planned Rooms

A MOST alluring color scheme interested me in a New England country house recently. The spacious, low-ceilinged living-room, with a cozy, ingle-nook at one end, had casement windows and doors opening on two stone porches and a terrace that overlooked the sea. The trim of the room was in white enamel paint, with mahogany doors. The walls were of silvery gray grasscloth, and the rugs were a soft olive green. The furniture was chiefly of silvery gray wicker; stained, not painted, and of very simple design. In addition there was an occasional piece of old mahogany.

But the principal attraction was a wonderful English cretonne of which valanced window-curtains, lamp-shades and several sofa-cushions were made. This cretonne had all the richness of the finest stained glass, and reminded me of La Farge's famous Peacock Window. It had a gray background over which shaded green peacocks spread their decorative tails, while bunches of deep purple grapes and rose-pink peonies gave the requisite dash of color. The portières, leading into the hall and dining-room, were of Arras cloth in an exquisite shade of purple, and the cushions for the wicker chairs and divans were also of Arras cloth, some in purple and some in green. Fascinating shades for the electric light were made of small pink wall-paper flowers appliquéd

on a semi-transparent material. The casement doors had curtains of silvery green unfadable gauze—shirred top and bottom.

The dining-room, opening out of the living-room, carried out the same color scheme, only, instead of the grasscloth, the walls were wainscoted in square white panels for about five feet. Above the woodwork was a charming foliage paper, shaded gray poplar trees on a white ground. The same colorful cretonne was used here with green rugs and mahogany furniture.

Hot Water from the Furnace

FURNACE water-backs for supplying the hot water necessary for the entire house—bathroom, butler's pantry, kitchen, laundry, etc.—are now to be had at a very low cost, and are widely coming into use. The vast advantage of installing them in the furnace of the house, and so only having one coal fire both to heat the house and supply hot water, are readily apparent to all careful householders. It should be remembered in this connection that such a water-back will absorb a cer-

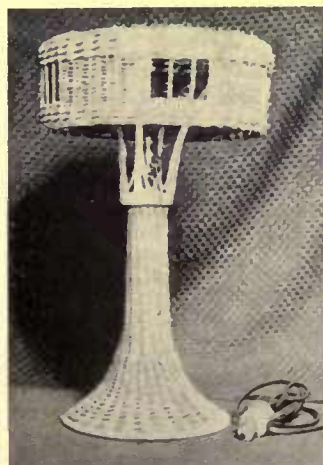
tain amount of the furnace fire heat. When planning for a new heater, allow two feet more heating surface in its capacity for each gallon of water the kitchen boiler contains; for example for a forty-gallon boiler allow eighty additional feet of heating surface if your furnace is a "direct" steam system, and three feet additional heating surface if the heater is a "direct" hot water system. Also see that a sufficiently large hot-air furnace is installed when this appliance is to be used.

Willow Lamps

A DECIDED novelty in the way of lighting arrangements is the electric light stand in the shape of a lamp made of willow, the standard, shade, and all parts being woven in one piece. The incandescent bulb is screwed to the regulation socket just as in an ordinary lamp made of brass or copper with glass shade, and with the cord and plug the lamp may be attached to any electric light fixture.

It is suitable for both indoor or outdoor use. Corresponding in design as it does with the present style of willow furniture, it makes a most attractive piazza light and is of so little weight that it is easily moved about. For use in a library, hall or den it is equally effective when left the natural color or stained to tone in with the furnishings of the room.

The shades are made in a number of different shapes, some conical, others with perfectly flat tops, and a number have simple designs in openwork effect, either in the sides or serving as a decorative border. For indoor use this is particularly ornamental, as the shade may be lined with silk of a contrasting tone that gives a satisfactory touch of color through the open places. With the exception of the electric light bulbs there is nothing about these lamps that can be broken and, owing to the fact that the shades are practically opaque they are useful as reading lamps, besides being just the thing for rooms or porches where a certain amount of light is desired with no glare from a shade of brilliant colors.



The use of willow is by no means limited to the summer season. It is now woven into very useful lamps for the informal room



Garden Suggestions and Queries



Conducted by
F. F. ROCKWELL

The Editor will be glad to answer subscriber's queries pertaining to individual problems connected with the garden and grounds. When a direct personal reply is desired please enclose a self-addressed stamped envelope.

November

WHEN November comes we are thankful indeed to turn to the plants rescued from the garden—or more prudently grown all summer for winter gardening—that make cheery some spot in the living-room.

Without, the sky is dull, the wind chill and cutting: it is the season of sere and yellow leaves and a desolate outdoors. Within, every petal, even every fresh green leaf, for weeks to come, will be treasured, and rightly so, for whatever adds to beauty adds to life.

However, the trouble is not over—in fact, it has just begun—when we get our plants into the house. Only yesterday I called at a house where the mistress exhibited with some pride a fine lace fern (*Asparagus plumosus nanus*) which she had been doctoring up during the summer for a friend. She added sadly, however, that she could not keep it in its present

flourishing condition because she has gas illumination in the house. There are many less experienced women who do not realize the baneful effect of even a trace of gas in the air, and who fuss over their plants all winter and watch the leaves and flower buds die as they unfold, without knowing what causes the trouble, and wondering why they do not have better luck with flowers.

How I Save My Geraniums From Year to Year

FOR a number of years I have not been obliged to buy any geraniums for my garden, having saved my stock from year to year. While I succeeded in carrying over the plants, I cannot say that they were particularly good to look at in the early spring, because of their long drawn out scraggy appearance. Judging from what I saw in other gardens, I was content with this condition. A fortunate meeting with a person more skilled in the gardening art than myself quite upset my notions. It was a happy upheaval, however, for I learned much about geraniums, and now instead of plants for which I feel obliged to make apologies, I can show a stock that will compare favorably with that grown for the trade. In the fall I now take out of the garden all the geraniums that I care to carry over through the winter. Some of these I pot and others I pack away in boxes, first cutting them down to mere stumps. Almost 90 per cent. of these small cuttings will grow to be plants. These boxes with the stumps are put in the cellar and just kept alive by an occasional watering during the winter. If a weak growth shows up it is pinched off.

About March I take out these stumps and pot them and place them at the cellar windows. Geraniums thrive best in a cool place. A warm room produces a lanky growth that makes poor plants.

I get good plants by bringing them along slowly in a cool temperature. If there is need of forcing it can be done with nitrate of soda, never with heat. This must be done carefully, as a disregard of instruction will defeat expected results.

I take a number of bowls, or larger receptacles, and fill with enough water to cover the roots of the geranium's stumps. Before this is done, however, I dissolve in the water about five or ten grains of nitrate of soda, according to the relative size of the vessel. The geraniums are then put in the light. In a short time root action begins and the plants make such rapid growth that in a month they can be potted off as stocky plants or even planted outdoors. In administering this treatment, remember to change the water when it gets foul, and also to wash out the roots of the plants, as they are apt to collect a greenish scum.

In potting the geraniums from the water, do it carefully as the roots will be found very tender and rough treatment will do them great harm. I sometimes puddle the loam and pour it in on the roots. This is a good method and results in the minimum injury to the delicate root fibre of plants.



The nitrate solution should just cover the roots of the plant to be forced



After standing in the light awhile the effects soon show in a vigorous and stocky growth

In connection with my-cellar treatment I have a coldframe out of doors, and just as soon in the spring as possible, even before the frost is gone, I put out my plants. On cold nights I cover them with mats. This treatment in the coldframe hardens them and makes them in prime condition for planting.

I wish I could impress on people the fact that there is no mystery or difficulty in keeping plants over during the winter in the cellar and then getting from these same plants in the spring a new stock sufficient to plant your garden many times over. The idea is to keep them quiet in the winter and then force them early in the spring. Cuttings taken from any of them at this time will grow and will, with the aid of a coldframe, make sturdy plants by planting-out time.

Care of Plants in the House

IN order to be successful with plants in the house, one must give them the right conditions: a proper environment, proper temperature, proper ventilation and proper degree of moisture.

In regard to the first condition there is not room here to go into much detail. In most dwelling houses there may be found one or two sunny windows that may be fitted up with shelves and used for the winter garden. The first shelf, on a level with or a few inches below the window sill, may be made a foot or even two wide and longer than the width of the window, as some plants will thrive without direct sunlight, and may be kept in the partially shaded background. Other shelves, eight to twelve inches wide, may be fitted in above, at sufficient height to allow the plants on lower shelves plenty of room. If a thin strip of wood, say $\frac{1}{2} \times 3$ inches, is nailed along each edge of the shelves, and they are covered with an inch or so of small pebbles, the pots will drain better, look neater, and make less muss than if simply set on the flat boards.

There are many instances in which a special place may be easily made for winter plants. Bay windows may frequently be partitioned off from the rest of the room, by glass partitions or even by curtains of closely woven cloth, and the temperature and moisture in the air within the enclosure managed independently of the rest of the room. This is fully as important in keeping the proper degree of moisture in the air as it is in giving an even temperature, for no matter how thoroughly the latter may be regulated, if the air is dry, as it is almost certain to be in any living-room, the plants will suffer.

The temperature for most house plants should be kept at from forty-five to fifty-five degrees at night—not under fifty degrees when it can be prevented. The day temperature may run ten to fifteen degrees higher. The temperature should be kept as even as possible, as much harm being done by sudden changes as by too low a temperature. Do not go by guesswork; a good thermometer should be kept

near the plants, but shaded from direct sunlight.

Ventilation is as necessary as heat. Plants to be healthy must have fresh air. As a general rule, plants in the house should be given all the fresh air possible while maintaining the required degree of temperature. This does not mean, however, that on a cold windy December day you should open a window near your plants because the thermometer climbed to sixty or sixty-five. To do so would work havoc with your plants. Direct drafts must at all times be avoided when the outside atmosphere is cold. A window in another part of the room, or behind a screen, may be used. Or in very cold weather, it will be better to bring it in in

and boxes saturated at all times so thoroughly that the soil is heavy, like mud. Well drained pots in summer, when water is evaporated very rapidly and when they are making rapid growth, will stand a great deal of watering. But in winter, when for the most part they are undergoing their resting period—usually from October to February, and when the soil will retain moisture for days—no such quantities should be given. The safest rule is to water thoroughly until the soil is wet through (as can be determined by inverting a pot some ten minutes after watering, and knocking out the ball of earth) and then withhold it altogether until the soil itself, by slightly drying out and whitening on the surface, indicates that more



The pleasure of house plants to cheer the winter days need not be missed simply because local conditions appear adverse. Here a little ingenuity has made a substitute for the greenhouse

some more roundabout way—through a hall or an adjoining room. Too frequently in cold weather our living-rooms are closed up tight as drums, and the air becomes unfit for humans as well as for plants to breathe. This is a false policy, for it is easier to keep warm in a fresh than in a de-oxygenized atmosphere. Plants are more neglected usually in regard to ventilation than on any other score.

There is also a good deal of misunderstanding in regard to watering. Too frequently one finds the "little and often" system in use. A little sprinkle on top of the soil will wet it down half an inch or so and leave the bottom as dry as a cobblestone in a drought. Others indulge in the "plenty and often" way, keeping the pots

water is needed. Water thoroughly and then withhold it altogether until it is again actually needed, as near as you can judge.

It is not, however, for moisture in the soil that plants in the house suffer most. Moisture in the atmosphere is what they lack. It is dry air that holds them in check when the lady of the house thinks she has given them every care, and is sure that no coal or furnace gas is working insidious injury. It is in overcoming this difficulty that the enclosed partition of some sort affords great assistance. The air within such an enclosure may be kept as moist as desired. A good deal, however, can be done in the living-room. In the first place, keep dishes of water evap-

(Continued on page 326)



EDITORIAL



ASTRIDE A HOBBY

WHEN a man buys an automobile there are few details of its construction, design or working characteristics that he does not investigate in advance. Before he pays real money for a car he knows enough about it—unless he is the one man in a thousand who is willing to buy a “pig in a poke”—to expatiate at length upon its advantages in design and the excellence of the materials employed. He knows that only the highest class of drop forgings have been used in the axles; that the best known type of magneto has been put into the car; that there are installed all the little devices that make for comfort and luxurious ease of operation. It is hard to conceive of a man who would buy a car without knowing that he was getting tires of a reputable manufacturer. Yet this same man, who must have the quality of every part in an automobile demonstrated before he buys, will buy a house after the most casual sort of an inspection. He does not know whether the stucco on the outside walls is on a good or a worthless support. He does not know whether this support is fastened directly to the stud frame or whether it has the desirable board sheathing and building paper in between. Whether the flooring consists of a single thickness of cheap North Carolina pine or of dependable Georgia pine on an under-floor, is a question that he does not think it worth while to investigate. Why this unquenchable thirst for information in the case of the automobile and this blind faith in a protecting Providence in the case of the house? The only reason that occurs to us is the tendency on the part of a hobby to induce hard riding. Moral: Get the house hobby.

PRIDE OF CRAFT

IF you will examine in detail a house built a century or more ago, comparing it with a modern house of the same general class, you will notice a difference that corresponds very closely to the difference between a piece of jewelry that is modeled by an enthusiastic hand-craftsman and one that is stamped out by a die in a machine. Here and there in the old house you will find some curiously interesting eccentricity of construction—some ingenious solution of an awkward problem. When a carpenter was fitting the wood trim around a door close to the end of a partition he used his judgment and turned out an attractive if not a perfectly symmetrical doorway. Today the carpenter would change the location of the door rather than risk being unable to follow his rule-of-thumb treatment of the opening. The result is that the great majority of our modern homes look as if they had been stamped out with the same set of dies from some vast house-making machine. It is too bad, for this makes it all the harder for a home to have that air of individuality that we all recognize and promptly covet on sight. Our houses are turned over to us, fresh from the die-stamping machine, and our only hope of attaining individuality in them lies in the furnishings and decorations. But there is a way out of this and it deserves earnest consideration. Before the building is quite finished, go over it and note the details that are not beyond your own ability as a craftsman. There are sure to be some of these, even for the most unskilled. In all probability you are enough of a carpenter to build your latticework for vines, from your own designs; or perhaps you can take the bread out of your mason's mouth by laying your own hearth; homemade hardware can be given an air of distinction very easily, as Mr. Maxfield Parish has so well shown in his own home; built-in shelving and presses for photographs, engravings and such things are not beyond most of us. If we would stamp something of our own personality upon our homes we must make up our minds to the fact that the work of our own hands must find its way into the structure—the more it is in evidence, pro-

vided only that it is well done, the more surely will that particular house be ours unmistakably.

A SUGGESTION FROM THE COUNTY FAIR

THE county fairs of 1911 are past and the man who failed to attend at least one of them missed a rare treat. There is a good wholesome atmosphere about these fairs that fosters optimism. Each year the prize pumpkin seems a bit larger than ever before, the broad-backed hogs more unwieldy and shorter-legged. On every side there is something to remind you that nature has once more produced a marvelous harvest of grains, fruits and livestock. A day at a big county fair is the surest antidote for pessimism that we know.

It seems a pity that the amateur gardener has not taken his cue from the county fair and shown a greater activity in organizing competitive exhibitions of flowers, fruits and vegetables. While we do have the great benefit and pleasure to be derived from a few of these shows, like the recent Dahlia Show in New York and the annual events of the Massachusetts Horticultural Society, competitive exhibiting among amateur gardeners is not nearly so common as it should be. In England the various local shows of the National Rose Society bring out not only the keenest competition between amateurs and professionals, but a wide dissemination of rose-growing knowledge that has made our English brothers the most skillful rosarians in the world. Our fellow-enthusiasts, the amateur photographers, have no end of competitive exhibitions, tending always to raise the standard of pictorial photography in print or lantern slide to a still higher level. The time has come for some much-needed work in organization of local horticultural societies among amateurs. What can you do toward helping along the good work?

EGG LAYING IN THE CANAL ZONE

AS related in the Canal Record of August 23, 1911, the hospital at Ancon started a poultry farm in January, 1910. They began with 200 Brown Leghorn hens and 15 cocks. Later 100 hens and 10 cocks of the Rhode Island red type were added, and the next winter 230 Plymouth Rocks arrived. This stock was increased this year by 100 Brown Leghorn fowls. The first 18 months saw a total egg production of 53,469 eggs (about 4,455 dozen). Analyzing the part each breed had in this total it was found that the Leghorns laid 29,329 eggs, the Reds, 9,098 and the Plymouth Rocks, 15,042. As to the comparative share each hen had in this total, the figures showed that the monthly average over a period of eighteen months for each Brown Leghorn was 8.2 eggs; for R. I. Reds, 7.7 eggs, and for Plymouth Rocks, 6.5. A table is also published giving the monthly number of eggs produced and the approximate cost. Although difference of climatic conditions would have to be taken into consideration to apply these figures to conditions here, the comparative laying ability of the different breeds and the cost of running the farm may be used as standard with our results. We reproduce this table entire:

	No. of Dozen.	Total Cost.	Cost per Dozen.
January	287	\$36.97	\$0.13
February	243	28.33	.11¾
March	247	28.81	.11¾
April	281	29.16	.10½
May	299	29.94	.10
June	235	32.34	.13¾
July	223	25.15	.11¼

The greatest story that these figures tell is the careful method of proceeding in a business-like way in recording the success or failure of a husbandry undertaking. Without such a record the last year's experiences have nothing to teach us for the future. They shed no light on improving our methods or buying new stock.

PRATT & LAMBERT VARNISHES



A FLOOR, a fine wainscot, a front door, a carriage, a boat—everything different requires a different varnish. That's why there are over 300 different Pratt & Lambert Varnishes, each made the best for its special purpose. Ask your architect and painter to select the right Pratt & Lambert Varnish—the one that you can *know* will give just the right finishing touch.

Vitralite

The Long-Life WHITE ENAMEL for permanent, pure-white effects, indoors or out, on any surface. It never discolors nor cracks. Flows easily, doesn't show brush marks, dries with a hard, porcelain-like gloss that lasts.

"Decorative Interior Finishing"

our free book, will help you decide on decorative effects. Send for it. Send for Free Vitralite Booklet and sample panel finished with Vitralite. They will convince you.

Use "61" on Floors. It's mar-proof, heel-proof, water-proof. Send for free sample panel and test it.

Ask for booklet, "The Finished Floor." If your dealer can not supply you, write to
117 Tonawanda Street, Buffalo, N. Y.
In Canada, 61 Courtwright St., Bridgeburg, Ont.

"61" FLOOR VARNISH

PRATT & LAMBERT VARNISHES
AMERICAN FACTORIES ESTABLISHED 62 YEARS FOREIGN FACTORIES
NEW YORK BUFFALO CHICAGO LONDON PARIS
BRIDGEBURG, CANADA HAMBURG



Bulbs

DIRECT FROM HOLLAND

*Hyacinths
Tulips
Narcissus
Crocus*

The Giant Darwin Tulips

THE FINEST TULIP GROWN
OVER FIFTY NAMED VARIETIES

*Paeonies in great variety from the largest collection.
These and many other varieties of bulbs are
found in our 1911 Autumn
Catalogue mailed free.*

Fottler-Fiske-Rawson Company

FANEUIL HALL SQUARE, BOSTON



GROW ORCHIDS

YOU will find it most fascinating. Wonderful results may be obtained by amateur growers by following a few simple directions fully explained in our illustrated Orchid Book which we send you upon request. It contains reliable information about planting and subsequent care of this most beautiful plant, with description and prices of the various varieties, with special suggestions for beginners.

Competent Gardeners and Assistants. Any lady or gentleman requiring their services can have them by applying to us. No fees. Please give particulars regarding place. Visitors always welcome at our Nurseries.

**JULIUS ROEHRS CO., EXOTIC NURSERIES
RUTHERFORD, NEW JERSEY**

BOBBINK & ATKINS

World's Choicest Nursery and Greenhouse Products
Autumn Planting and Interior Decoration.

The proper way to buy is to see the material growing. We shall gladly give our time and attention to all intending purchasers visiting our Nursery, and invite everybody interested in improving their grounds to visit us. Our Nursery consists of upward of 300 acres of highly cultivated land, and is planted with a choice selection of Ornamental Nursery Products, placing us in a position to complete plantings and fill orders of any size.

EVERGREENS AND CONIFERS IN TUBS, for interior and exterior decoration. More than 75 acres of our Nursery are planted with handsome specimens. Our plants are worth traveling any distance to see.

DECIDUOUS TREES AND SHRUBS. Many acres of our Nursery are planted with several hundred thousand trees and shrubs. It is worth while to visit us and inspect them.

HARDY OLD-FASHIONED PLANTS. We have thousands of rare, new and old-fashioned kinds. Our Hardy Plant Grounds are especially interesting at this time. Special prices on quantities.

RHODODENDRONS. Many thousands of acclimated plants in Hardy English and American varieties are growing in our Nursery. These can be planted at this time in Southern and Far Western States.

HEDGE PLANTS. We grow a large quantity of California Privet, Berberis and other shrubs for hedges.

HARDY TRAILING AND CLIMBING VINES. We have them for every place and purpose. Ask for special list.

BOXWOOD IN TUBS. We grow thousands of plants in many shapes and sizes. Everybody loves the rich, green color and delicate aroma of old-fashioned Boxwood.

BAY TREES, DECORATIVE PLANTS FOR CONSERVATORIES, interior and exterior decorations are grown in our 250,000 square feet of greenhouse.

PALMS. We grow Kentias, Phoenix, Dracaena, in quantities, and a variety of beautiful plants for house and greenhouse decoration. Don't fail to walk through our greenhouses when visiting our Nursery.

BULBS AND ROOTS. We import quantities of Bulbs and Roots from Japan, Holland, and other parts of Europe. Our Special Autumn Bulb Catalogue will be mailed upon request.

POT-GROWN STRAWBERRIES. French Four Season, and all other leading varieties. Ask for special list.

PLANT TUBS AND WINDOW BOXES. We manufacture every shape and size.

OUR NEW GIANT FLOWERING MARSHMALLOW.

Everybody should be interested in this Hardy New Fashioned Flower. It will grow everywhere, and when in bloom is the Queen of Flowers in the garden. Blooms from the early part of July until the latter part of September.

OUR ILLUSTRATED GENERAL CATALOGUE NO. 40 will tell you about the above and all our other products for decorating Lawns and Gardens.

WE PLAN AND PLANT GROUNDS AND GARDENS EVERYWHERE.
THE GENERAL SUPERVISION OF PUBLIC GROUNDS AND PRIVATE ESTATES
A SPECIALTY.

WE CAN MAKE OLD GARDENS NEW AND NEW GARDENS OLD WITH OUR "WORLD'S CHOICEST NURSERY PRODUCTS."

VISITORS, take Erie Railroad to Carlton Hill, second stop on Main Line, 3 minutes walk to Nursery.

BOBBINK & ATKINS

Nurserymen, Florists and Planters.

Rutherford, N. J.



Asbestos "Century" Shingle Roof—Residence, Dr. Robt. Damerell, Red Cloud, Neb.

Asbestos "Century" Shingles

"The Roof that Outlives the Building"

PROPERTY owners often write us to know if we can supply Asbestos "Century" Shingles for some special style or kind of building.

Our answer to that is that we can fit out *any* building with an Asbestos "Century" Shingle Roof.

Our assortment of shapes is universal. It has to be.

Asbestos "Century" Shingles are in use today on practically every kind of building occupied by civilized man.

You will find them on residences of all types—from the cottage and bungalow up to the most costly mansions of America and Europe.

You will find them on office buildings, public buildings, museums, factories, railroad stations and workshops.

You will find them in the temperate zone, in the tropics, near the Arctic Circle—impervious to every climatic condition and immune from fire risk.

Go to your responsible roofer and ask him to show you the *shapes* of Asbestos "Century" Shingles—the *sizes*—and the *three colors*: Newport Gray (silver gray), Slate (blue black) and Indian Red. *Or write us.* Send for Booklet C—"Points on Roofing." It will settle your roof problems to your great satisfaction.

The Keasbey & Mattison Company

Factors

Ambler, Pennsylvania

Branch Offices in Principal Cities of the United States, and London, England

Garden Suggestions and Queries

(Continued from page 323)

orating on or by all registers, radiators, etc. These may be made decorative as well as useful, by the use of cut flowers, or placing in each an inverted empty pot to support a fern, palm or other plant which will thrive in partial shade. In the second place, shower the plants frequently. This does not mean watering them. Use a rubber sprinkler, or better, a small florist's syringe, and spray the foliage without wetting the soil.

This treatment is useful not only in keeping the atmosphere moist, but it helps keep the foliage clean. The plant's lungs are its leaf pores, and if these get coated over and clogged with dust it cannot remain so healthy as it otherwise would. The plants should be covered over with a light cloth when the room is being swept, and the leaves wiped off occasionally with a soft cloth. Plants kept in such positions that they cannot be freely sprinkled where they are may be from time to time set in the bath-tub or sink and given a showering there.

A sharp watch must also be kept for insects. The conditions which usually breed them are weak, crowded or dry plants, and lack of thorough ventilation. Cleanliness and fresh air will do much to keep them away. The green plant louse or aphid, mealy-bug, a white cottony looking bug, and the red spider, so minute that he can hardly be seen, are the three most commonly encountered. Methods of fighting them will be explained in a subsequent issue of HOUSE & GARDEN.

IN THE VEGETABLE GARDEN

THE vegetable garden looks pretty forlorn now—that is, if you have not cleaned it up yet. It must look empty at this season of the year, but it should look neat and clean. No old pea bush, bean stalks, asparagus tops, should be left scattered around to harbor insects and delay work next spring. Clean them all up and burn or compost them. Most of the vegetables will have gone to winter quarters before this. Parsnips, salsify, brussels sprouts, celery, are yet out. The former, for use during winter, should be dug out and trenched or stored. Some may be left in the ground where they are, but it will be better to take them up and put them somewhere out of the sun, where they will stay frozen. Celery should be trenched or stored, as already described, for early spring use. Roots and all are stored, and it is not trimmed until wanted for market or table.

Do not forget the compost heap. It is the chance to be storing up plant food for next summer's garden—anything that will rot, as we have frequently said. A little lime, and once in a while a wetting down with water, will help things to rot quickly.

IN THE FLOWER GARDEN AND GROUNDS

OUTSIDE there is not much that requires attention. See that the roses have been properly cut back and mulched,



UMBERT'S ARTS & CRAFTS

HOLLAND DUTCH CRAFTS

OUR NEW STYLE BOOK MAILED FREE

It should be in the hands of every home maker who appreciates the artistic, practical and highest quality of Craftsmanship in furniture. The booklet illustrates over 300 patterns of our Holland-Dutch Arts & Crafts Furniture, gives an interesting history of this charming style since the 15th Century, and contains colored plates of Arts & Crafts interiors, showing what tasty and harmonious effects can be obtained for a small expenditure.

Ask your local dealer to show you Limbert's Holland-Dutch Arts & Crafts, and see our trade-mark branded into the wood. If he cannot supply you, send us his name and we will send you the address of our Associate Distributor nearest you.

CHARLES P. LIMBERT COMPANY
Holland, Mich. Dept. K Grand Rapids, Mich.

that the stalks and leaves of hardy perennials are cleaned up and removed, and a mulching of leaves or rough manure given. The objection to leaving the old leaves for a mulch is that disease germs and insects' larvæ and eggs are carried over in them, ready on the spot to work injury the next season.

In the trees and shrubs any branches which may have been broken by fall winds should be cut off clean and painted if of any size. Do not leave them to be whipped about and start rot where water can lodge in uneven breaks.

As the snows come, and the last vestiges of summer disappear, keep your eyes open for pleasing effects with berried and colored-barked shrubs in the gardens you visit or pass, and note what could be utilized in the improvement of your own home surroundings.

OTHER SUGGESTIONS FOR HOUSE PLANTS

HOUSE plants of any kind that seem to need more life and energy will thrive by submitting the soil to a course of ammonia water application. Ammonia, when diluted in the proportions that one makes it to wash windows, is a fertilizer. Soapy water is quite as good, and a combination of soapy water and ammonia is still better. Give the poor house plants a drink that is also food to them when you are about to throw into the drain a material that they actually require to keep them at their best.

Another cheap and effective way to keep house plants free from disease is to put a bag of soot in a pail of water, let the contents settle and use a very weak solution for watering plants. Soot is a very valuable fungicide, and when used in this way will keep plants healthy.

During the winter months house plants are frequently attacked by destructive worms. Their presence is indicated by a sudden drooping of foliage and a general decline of vigor. Yet there is no outward sign of the underground siege. A way to exterminate these pests is found by pushing into the earth, near the plant, a number of parlor matches, sulphur end down. The fumes of sulphur destroy the animal life, yet are non-injurious to the vegetable life of the plant. An almost instantaneous relief is effected.



Fireplace Fixtures

(Continued from page 297)

which is to keep the sparks from flying out into the room and causing damage. For practical purposes only, the best thing is the common woven-wire article in brass, copper or black enamel. These screens are either in one rigid piece or they fold in sections. They are sure to keep the sparks in place and they leave an unobstructed view of the fire. One commonly used variety is of black wire in a brass frame, in four or five folds. Their height



THE hostess who appreciates the niceties of snowy linen, rare china and glistening silver, also knows the appropriateness of

NABISCO Sugar Wafers

as the perfect auxiliary to any dessert. With ices or frozen puddings, with fruits or beverages, these fairy-like sweets are equally delightful.

In ten cent tins

Also in twenty-five cent tins

CHOCOLATE TOKENS—Delightful confections of unusual goodness—chocolate covered.

NATIONAL BISCUIT COMPANY



Plant for Immediate Effect Not for Future Generations

Start with the largest stock that can be secured. It takes over twenty years to grow such Trees and Shrubs as we offer.

We do the long waiting—thus enabling you to secure Trees and Shrubs that give an immediate effect. **Price List Now Ready.**

ANDORRA NURSERIES Box CHESTNUT HILL,
H. PHILADELPHIA, PA.

WM. WARNER HARPER, Proprietor

BEFORE YOU BUY A FOOT OF LUMBER

FOR ANY PURPOSE, big or little, indoors or out, in city or country,

Write for the proper volume of **The Cypress Pocket Library. (Free)**

Backed by our "All-round Helps Dept.," it is the "guide, counselor and friend" of

ALL THE PEOPLE WHO CARE WHAT VALUES THEY GET for their LUMBER MONEY.

Why not buy WOOD with the same discrimination you apply to other things?

We do not advise CYPRESS for *all* uses, but *only* where it can *prove* itself "the one best wood" for *your* use.



- 1 You don't tell your broker: "Buy \$10,000 of Railway stocks!" Hardly! You tell him *what*.
- 2 You don't simply tell your Real Estate agent: "Buy me 'some land'!" You tell him *where*.
- 3 You don't tell the dry goods clerk: "I want 8 yds. of cloth!" You say "silk," "wool," or "linen."
- 4 You don't merely order "200 head of live stock!" You specify Horses, Cattle, etc., and the *Breed*.
- 5 You don't tell the contractor: "Build me a house!—and paint it!" You dictate the *plans*. And the *colors*.

WHY NOT BUY LUMBER WITH EQUAL CARE? INSIST on CYPRESS—"THE WOOD ETHERNA." WRITE AT ONCE for VOL. of CYPRESS PKT. LIBR. that fits your case. WE'LL REPLY AT ONCE.

- | | | |
|--|---|---|
| THESE VOLUMES MAY BE HAD NOW: | 12. "The Wood Eternal" for Exterior Trim. | 19. Cypress for Canoes and Boats (defies decay). |
| 5. How to Avoid Mistakes in Bungalows. | 30. Cypress Pergolas, etc. (8 Working Plans Free). | 24. "What People (who know) SAY of Cypress." |
| 4. CYPRESS for SIDING—And Why. | 7. Cypress Shingles "Yes Book" (Last a century). | 26. Japanese Effects (Sugi) in Cypress. |
| 22. Cypress SILOS and Tanks (of course). | THESE IN PREPARATION—APPLY NOW: | 11. Cypress for Sash, Blinds and Frames. |
| 18. Cypress Bungalow "A" (Complete Working Plans and Specifications Free). | 10. Cypress for Artistic Doors (a revelation). | 14. Cypress for Gutters, Curbs and Culverts. |
| 6. Cypress Bungalow "B" (Complete Working Plans and Specifications Free). | 2. "Pecky" Cypress—"The Vaccinated Wood." | 23. Cypress "Perfect for Exterior Painting." |
| 3. Cypress, "Only GREENHOUSE Wood." | 4. Cypress "Nothing Else," for BARNs, etc. | 25. "Perfect for Interior Painting and Staining." |
| 29. Cypress Shingle House (Free Working Plans and Specifications). | 1. "The Wood Eternal"—What It Is (incl. U. S. Govt. Report). | 27. As a "Preventive of Property Depreciation." |
| 16. Cypress for Porches, etc., and the Reasons. | 8. Cypress Bungalow "C" (Free Working Plans and Specification). | 20. Cypress for All FARM Uses. |
| 31. Cypress' Great Beauty for Interior Trim. | 28. Cypress for all Trellises and Arbors. | 33. "How I Finish Cypress," by a Craftsman. |
| | 15. Cypress for Dairy Uses—"The Only Wood." | 32. "Caustic Surfacing of Cypress," (novel). |
| | | 21. Cypress for "All Outdoors" (of course). |
| | | 17. Cypress for All "Odd Jobs" (of course). |

When planning a Mansion, Bungalow, Pergola, Pasture-Fence or Sleeping-Porch, remember—"With CYPRESS you BUILD BUT ONCE."

Let our "ALL-ROUND HELPS DEPARTMENT" help YOU. Our entire resources are at your service with Reliable Counsel.

SOUTHERN CYPRESS MANUFACTURERS' ASSOCIATION

1210 HIBERNIA BANK BUILDING, NEW ORLEANS, LA.

INSIST ON CYPRESS OF YOUR LOCAL LUMBER DEALER. IF HE HASN'T IT, LET US KNOW IMMEDIATELY

OUR BARGAIN PRICES STILL HOLD GOOD DURING AUTUMN

While it is too late now to transplant Evergreens,

IT IS JUST THE RIGHT TIME

to transplant Deciduous Trees, Shrubs, Roses, Hedges and Bulbs.

ROSE HILL NURSERIES

New Rochelle, N. Y.

In writing to advertisers please mention HOUSE AND GARDEN.

is from 25 to 36 inches, and their prices are from \$1.50 to \$2.50 a fold. Extra folds can be had for very large fireplaces on special order. The same screen can be furnished in solid nickel plate, bronze or dead black to match the other fireplace fixtures when desired.

Still another variety of the fireplace screen is known as the spark arrestor this is one flat section of wire neatly bound, to stand close against the frame work of the fireplace, with slots in the bottom for the andirons. Still another type of folding screen is of the arts and crafts design with shield of fine brass wire held by brass framework with cast bolt heads; this is the proper screen for the craftsman type of fireplace.

Next comes the wood basket, or whatever receptacle is selected for storing wood near at hand while it is waiting to be offered up for sacrifice. In many houses of recent construction the wood box is carefully concealed under a window-seat or under the settles of an inglenook, but where this arrangement is not possible there must be a wood box or basket. A fine wood box, not shown in the illustrations, is of solid quartered oak with hand-wrought steel hinges, handles and decorations. It is 36 inches long and costs \$50. These wood boxes would hardly be the proper thing for many decorative schemes, but they go well with a majority of the modern fireplaces of brick or tile. They are not in any respect Colonial, and would be out of place in a Colonial room where the better thing is undoubtedly the less conspicuous basket.

Another staunch friend of the olden time fireplace was the bellows. Present-day methods of fireplace construction, with their numerous ways of insuring perfect draft, place the bellows among the implements that have become more ornamental than useful, but still they are good friends to have on hand, and they do more than any other commonly known fireplace furnishing except the andirons and the tool sets to bring back the spirit of the olden days. Carved woods or hammered brass or copper are the common materials for bellows, and the design, when there is any, is usually quaint and often grotesque.

In the time of our forefathers, when the fireplace was used for cooking as well as for heating, the crane and kettle were its most indispensable assets. Unfortunately we have no excuse now for these things, and they would hardly be at home in a modern house unless in a camper's bungalow or in an old-fashioned farmhouse. Wrought iron is, of course, the logical thing for these articles, and the crane can be had for \$7.75, while the kettle costs \$6.

In the same class with the crane there is another little device whose kind in some strange way has almost become obsolete. This is the trivet, and it is doubtful if many of us would know a trivet without an introduction. It has never become permanently transplanted in America, but the

old English hearth was never complete without its trivet, and if one of New York's dealers in antiques has his way, it may soon become re-established on this side of the Atlantic as one of the most conspicuous of fireplace furnishings. It is a simple little stand with a cast brass flat top, and usually on a three-legged base about a foot high. Its purpose is to stand close up to the fire and hold the tea-kettle or other dish for warming purposes, thus taking the place of the crane. The toast stand belongs to the same family, and is used in the same way, but can only stand on the hearth on its own feet, whereas the trivet has hooks on one side to be hung over the foot rail or fender when desired. Dickens tells us about the trivet, and it has been a leading character in many fascinating fireside stories. In one of its forms it has an ingenious sliding arrangement whereby it can be pushed out over the flame, and in some forms it has extra long legs with room for a plate rack below the top surface.

Another old English idea which never gained much headway in America is the seat fender. This is a simple piece of furniture used as a settee in front of the hearth or to be pushed up against the mantel when there is no fire burning, and still serve the same purpose. It is made in all lengths from 18 inches to 5 feet, and usually has an upholstered top. Its most fitting place would seem to be in large halls, club-rooms, or places of that sort.

It would hardly do to omit the fender or foot rail from the catalogue of the hearth's equipment. We do not use the foot rail as much as our ancestors did. It is, in fact, one of the things whose value we have grown to doubt. It offers no protection against sparks or heat, like the screen, and certainly it does not keep us out of the fire were we determined to walk into it. On the other hand, it would be a most convenient thing to trip over if we were looking for something for that purpose. Then, again, while it may have been ornamental at one time, it is no longer needed as an ornament, and we have grown to prefer the fine brick and tile hearths just as they are. Still, if the fender is wanted, it can be had in any one of many fine patterns in polished brass.

The fireplace hood is a somewhat modern device originally introduced to secure better draft when the chimney is not altogether efficient or large enough for this purpose. More recently the hood has often been extended further up the mantel, and sometimes even to the ceiling, to produce a decorative effect. However, if the chimney is well constructed to permit the fire to draw properly, we can well dispense with the hood, and can rely on the brickwork or tile of the facing for the decorative requirements of the case. The hood is seen at its best in the craftsman style of fireplace, and it affords much opportunity for the worker in brass and bronze to display his skill, but there is something about it that makes us feel that



In the Bell Democracy

Membership in the telephone democracy of the Bell System means equal opportunity for every man, no matter who he is or where he is.

Each member of this Bell democracy has the same chance of communication, limited only by the distance the voice can be carried.

However remote, whether in the adobe house on the Rio Grande, on the Montana sheep ranch or in the isolated New England farm house, the Bell telephone is an open doorway to the Universal Bell System.

From each Bell outpost run lines that connect it with the central office—that nerve center of the local system.

Long distance and toll lines connect these nerve centers and furnish clear tracks for telephone talk throughout the land.

12,000,000 miles of wire are the highways over which 20,000,000 telephone talks are carried daily.

The Bell System binds together the social and business activities of a people in a shoulder-to-shoulder march of progress.

**AMERICAN TELEPHONE AND TELEGRAPH COMPANY
AND ASSOCIATED COMPANIES**

One Policy

One System

Universal Service

A Furnace Only 51 Inches High

With more heating surface and capacity than ordinary furnaces of larger size, making it possible to get a rise in heat conducting pipes that is so desirable and necessary. This principle is well recognized, but its application is new because the INTENSE is the latest scientific furnace put on the market.

**INVESTIGATE INTENSE FURNACE
AT ONCE THE**

"Distributed Draft—Pure, Dustless Air"

Its distributed draft and patented check damper insures great fuel economy. The surfaces are self-cleaning; no dust or soot can accumulate or get into living rooms. It has vast radiating surface; a simple hot water attachment; a knocked down square jacket and other features your furnace man will recognize. Note portable ash pan—a great convenience. Two sizes for ordinary requirements. Arranged in batteries for larger buildings. *ASK why this is done.* Send us Architect's and Dealer's name and ask for booklet and full particulars. We will send free a "Physician's Treatise on Warm Air Heating and Ventilation."

THE G. J. EMENY CO.

51 Hubbard Street, Fulton, N. Y.



"Standard" GUARANTEED PLUMBING FIXTURES



YOUR home is sanitary only as your plumbing fixtures are sanitary and modern. Each fixture should be carefully chosen for its purpose and only such accepted as bear the "Standard" guarantee label.

"Standard" guaranteed plumbing fixtures meet the most advanced requirements, both as regards quality and sanitary efficiency. Our guarantee is assurance to you of long service and satisfaction. Look for the guarantee label. It is on every genuine "Standard" guaranteed fixture and is for your protection and the protection of your home and family.

Genuine "Standard" fixtures for the Home and for School, Office Buildings, Public Institutions, etc., are identified by the Green and Gold Label with the exception of baths bearing the Red and Black Label, which, while of the first quality of manufacture, have a slightly thinner enameling, and thus meet the requirements of those who demand "Standard" quality at less expense. All "Standard" fixtures with care will last a lifetime. And, no fixture is genuine *unless it bears the guarantee label.*

Send for a copy of our beautiful catalog "Modern Bathrooms." It will prove of invaluable assistance in the planning of your bathroom, kitchen or laundry. Many model rooms are illustrated, costing from \$78 to \$600. This valuable book is sent for 6 cents postage.

Standard Sanitary Mfg. Co.

Dept. 40

PITTSBURGH, PA.

New York.....35 W. 31st Street
Chicago.....415 Ashland Block
Philadelphia.....1128 Walnut Street
Toronto, Can.....59 Richmond St., E.
Pittsburgh.....106 Sixth Street
St. Louis.....100 N. Fourth Street

Nashville.....315 Tenth Avenue, So.
New Orleans.....Baronne and St. Joseph Sts.
Montreal, Can.....215 Coristine Bldg.
Boston.....John Hancock Bldg.
Louisville.....319-23 W. Main Street
Cleveland.....648 Huron Road, S. E.

London.....53 Holborn Viaduct, E. C.
Houston, Tex.....Preston and Smith Streets
San Francisco.....Metropolis Bank Building
Washington, D. C.....Southern Bldg.
Toledo, Ohio.....311-321 Erie Street
Fort Worth, Tex.....cor. Front and Jones Sts.

its days are numbered and that we had better spend our money for other forms of decoration.

There is still one other fireplace furnishing that has its undoubted advantages and that is really essential for those who wish to burn coal in an open grate, and this is the portable basket. Baskets of this type can be had from 18 to 36 inches in length, and they cost all the way from \$5 to \$12. Wood baskets also come in a variety of forms and materials.



Character in Brickwork

THE article on "The Best Use of Brickwork," which appears in the February issue of *HOUSE & GARDEN* has awakened the interest of many of our readers. Among these is Dr. P. E. Truesdale, who



The possibilities for character in brickwork are well evidenced in this window treatment

encloses the following description of a novel piece of brick work. The building described is The Highland Hospital, at Fall River, Mass., and was designed by Mr. Parkerhouse Hooper, of New York.

An interesting artistic effect has been here achieved by the architect in the use of bricks. A Roman yellow brick is laid as a stretcher, while the headers are of a much lighter tone giving the surface a soft

SAMSON SPOT CORD



For Sash Cord. Will outwear common roughly braided cord or metallic devices many times over. The smooth, even braid minimizes abrasion and prolongs wear.

For Clothes Line. Will not kink, stretch or ravel, or stain the clothes, and is guaranteed to last at least five years even when permanently exposed to the weather. Look for our trade-mark, the Spots on the Cord.

Send for samples. Carried by all leading dealers.
SAMSON CORDAGE WORKS, BOSTON, MASS.

ANDIRONS FOR EVERY ENVIRONMENT

Your home should have an atmosphere of comfort and refinement. A cheerful fireplace with proper accessories will do more to give a room character than anything else.

Graf Fireplace Fixtures give a fireplace interest. They are made in a wide variety.

Be the prevailing note of your room Colonial, Dutch, French, Mission, or of any other type or period, we can supply the proper fixtures.

Write for our illustrated booklet "Fireplace Fixtures." It shows Andirons, fenders, seat fenders, smokeless gas logs, wood boxes, etc.

Write us NOW. Our book "Fireplace Fixtures" is FREE.
FRANK H. GRAF MANUFACTURING CO.
323 Seventh Ave. New York City

buff color. The deep yellow of the long brick is also relieved by the wide mortar joint which is nearly white.

The window arches are formed in counter sunk areas. The key of each window arch is subordinated by what would appear to be an original idea (if such there is) in the use of bricks. The periphery of this sunken area is made of headers alternating in color, deep yellow and buff. The center of the arch is a highly polished piece of marble of diamond shape. About this and surmounting the lintels are the same face bricks as above described, broken into squares and laid on edge. The cut surfaces of these bricks show quite rough, but not objectionable. Whether original with Mr. Hooper, or not, the design is artistic, attractive and wears well.



The Migrations of the Birds

(Continued from page 313)

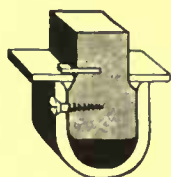
and several times after storms, windrows of dead birds have been found at the water's edge.

It is interesting to note the relation between migration and the bird's molting. Most birds care for the young until they are old enough to look out for themselves, then go through the molting period and when the new feathers are fully grown start on their southward journey in their fresh new clothes. But the birds that nest beyond the Arctic Circle have too short a summer to allow of such leisurely movements. They begin their migration as soon as possible after the young are out of the nest and molt en route. Various peculiar changes of plumage are presented by some birds in the different migrations. The bobolink goes south in the fall as an obscurely marked bird of buff and olive; he returns the next spring the well-known black and white denizen of the marshes. The scarlet tanager performs his fall migration in a suit of uniform greenish yellow that is known to only a small part of the persons who welcome him as an old friend when he returns the next spring in his striking black and scarlet.

Among the idiosyncrasies of bird migration may be mentioned the fact that a few birds choose different routes for the spring and fall migration. The Connecticut warbler goes north in the spring up the Mississippi Valley to its breeding grounds in southern Canada and then in the fall journeys at first almost due east to New England and then south along the Atlantic coast to its winter home. The golden plover has the same double route, but on a much larger scale. This bird goes south in the fall by way of Labrador and Nova Scotia and across the Atlantic Ocean to South America and by land to Argentina. Then the next spring the return trip is made by way of northwestern South America, Central America and the Gulf of Mexico to the Mississippi Valley and across central Canada to the nesting



This Greenhouse has Thirteen Separate Garden Plots



This is the U-Bar. The Bar that makes U-Bar Greenhouses the famous Greenhouses they are.

THIRTEEN plots of separate gardens devoted to flowers, fruits and vegetables. Roses and carnations—hundreds of plants filled with blooms practically nine months out of the twelve. Vegetables galore, from lettuce and spinach to cauliflower and tomatoes. Violets—those big, long-stemmed fragrant ones. Ferns in great variety and always in the best of good health. Foliage plants and tropical growths of weird beauty. Then quite the best of all—the old-fashioned flowers, such as snap-dragons, sweet peas, Canterbury bells, centureas—yes, and even nasturtiums, and just enough celosia and rock rose to take one back to the genuine old-fashioned gardens of our childhood. If you are looking after a genuine joy giving investment that will give endless pleasure to yourself and those about you, then a greenhouse is the thing. It's a safe hobby. A hobby that holds your interest year after year. But there are certain logical reasons why U-Bar greenhouses make the best hobby to ride. Reasons that have to do both with productiveness and the dollar and cents side. The catalogue tells and shows much—a personal interview, however, is quite the most satisfactory. Which shall it be—or both?



Just a glimpse in the potted plant plot

U-BAR GREENHOUSES PIERSON U-BAR CO

ONE MADISON AVE. NEW YORK
CANADIAN OFFICE, 10 PHILLIPS PLACE, MONTREAL

IN HOMES WHERE QUALITY COUNTS
you will find the

Brunswick

HOUSEHOLD
REFRIGERATING
and ICE MAKING PLANTS

PERFECT REFRIGERATION
INDEPENDENCE OF THE ICE MAN

Each plant is designed to meet the requirements of the individual home, and guaranteed to do the work that it is designed for

Our strongest argument is the testimony of BRUNSWICK users.

Write for list of installations, and if you are not convinced on the spot, you will at least be interested and the game half won.

A postal will bring full information.

INVESTIGATE. RISK A PENNY.

The Brunswick Refrigerating Co.
New Brunswick, N. J. Branch Offices or Agencies in Principal Cities



GARDEN TERRA COTTA



STRENGTH and durability characterize the Galloway productions.

Send for Catalogue of Garden Furniture, showing vases, flower pots, sun-dials, benches, etc.

GALLOWAY TERRA COTTA CO.
3218 WALNUT ST. PHILADELPHIA.

ORIENTAL RUG EXPERIENCE

"I have no hesitation in saying it that your ad is as honest as Abe Lincoln's might be, and your rugs fully justify any praise you might give them. One certainly would look long and far to find so choice a collection in the stores."

—Opinion of America's foremost collector.

Allow me to present you with my booklet showing still other proofs, and demonstrating that you will not get best value until you see my rugs in your home—I will put them in your hands without obligation. My list describes many scores of gem antique masterpieces. Write for it at once.

L. B. LAWTON, Major U. S. A., Retired
100 Cayuga Street - Seneca Falls, N. Y.

PROTECT Your floors and floor coverings from injury. Also beautify your furniture by using Glass Onward Sliding Furniture and Piano Shoes in place of casters. Made in 110 styles and sizes. If your dealer will not supply you Write us—Onward Mfg. Co. Menasha, Wisconsin, U. S. A. Canadian Factory, Berlin, Ont.

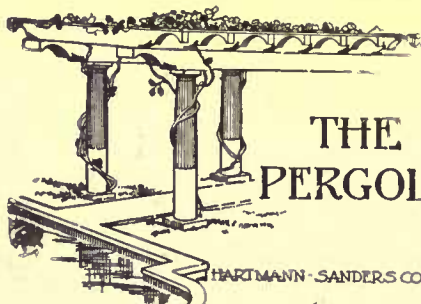


UNITED STATES MOTOR COMPANY

Columbia Stoddard-Dayton
Maxwell Liberty-Brush
Brush Brush Delivery
Sampson 35 Sampson



Freight and Delivery Motors
48 West 61st St., at B'way, N. Y. City



THE PERGOLA

HARTMANN-SANDERS COMPANY

Send for catalogue No. P-27 of Pergolas, sun dials and garden furniture, or P-40 of wood columns.

HARTMANN-SANDERS CO.

Elston & Webster Avenues, Chicago, Ill.
East office, 1123 Broadway, New York City

Exclusive Manufacturers of

KOLL'S PATENT LOCK JOINT COLUMNS

Suitable for Pergolas, porches and interior use.



Opens with the Foot.



THREE THINGS YOU NEED
FIRST: The only sanitary method of caring for garbage, deep in the ground in heavy galvanized bucket with bail. Garbage cannot freeze. Avoid the battered can and scattered refuse resulting from removal of frozen contents. Health Demands It.

UNDERGROUND GARBAGE RECEIVER
UNDERFLOOR REFUSE RECEIVER
UNDERGROUND EARTH CLOSET

SECOND: This clean, convenient way of disposing of ashes from furnace or hot water heater, cellar and yard refuse. Fire-proof, flush with floor. Abolish the old ash barrel.



THIRD: It supplies a safe and sanitary method to keep your water supply safe from pollution. Easy to Sweep into. It means freedom from plumbers' bills and all inconvenience resulting from frozen cesspool connections. A necessity for camp or farm without sewerage. Nine years in practical use. It pays to look us up. Sold direct. Send for Circulars on each.

C. H. STEPHENSON, Mfr.
20 Farrar Street Lynn, Mass.

A Camp Necessity

grounds on the shores of the Arctic Ocean.

Much has been learned during these later years of the migratory birds, but much remains to be learned. Not a month passes without additional information on some phase of the migration of some species appearing in the ornithological magazines. The migration route and the winter home are known now in more or less detail of every species of United States bird except the chimney swift. Where the millions of this well-known bird pass the winter has not yet been ascertained. Their progress southward in the fall across the United States can be traced and timed until they reach the northern coast of the Gulf of Mexico. Then they start out over its water and become lost to our knowledge. The next spring they return in countless thousands, but where they have spent the five intervening months is thus far an unsolved mystery.



Cosmos After Frost

LAST fall, quite by accident, I happened upon a pleasing discovery regarding the cosmos plant.

As usual, just as these plants began to flower prolifically in my garden, Jack Frost put in an appearance. One afternoon late in September the wind veered suddenly to the north, the mercury dropping steadily until there was no doubt that freezing weather was actually close at hand. So cold grew the air that there seemed not the slightest hope that temporary covering of any kind could save the glory of the cosmos plants and the only course left appeared to be the picking of the blossoms that their beauty might be enjoyed a few more days inside the house. My hands grew numb with the cold as I pulled the blossoms and in the wild hurry to save each flower one strong thrifty plant, fully four feet high, was unearthed bodily. The soil was so dry that not a particle of it adhered to the roots. Someway, I could not bear to leave the plant in this bare uncovered condition to the ravages of the cold, and although possessing not the slightest hope that the plant in question would live, I hastily filled an old leaky tin pail with earth, planted the cosmos in it, carrying the plant into the house along with the cut flowers.

That night the ground froze solid and the beauty of every growing thing was laid low. Great was my surprise and joy, however, to find that the cosmos plant I had brought into the house apparently was suffering no ill effects from its rude uprooting, the leaves giving no sign of wilting and the flower buds standing as fresh and wiry as when growing out of doors. For a few days the plant was kept in a shady corner of the room and the roots were watered faithfully. When the flower buds began to unfold, however, the plant was moved near a sunny window.

Until Christmas time the plant was

loaded with flowers, and I have never had a more showy or beautiful display in the house than was given by this cosmos plant.

The cosmos is one of the most beautiful of all the flowers. Its only drawback, in fact, is its late flowering season. That this exquisite plant may be so easily and safely transplanted when in full flower and that it will thrive gloriously in the house, seemingly, is a "find" worth telling others about.

A. F. F.



The Garden That Came

(Continued from page 305)

The hardy white pinks with their spicy breath came in the hands of the toughest boy in the city precinct, who loved my flowers; and the sweet rocket that hurries to complete her masterpiece of white and lavender in a shady corner every spring before the roses begin to exhibit, came in the tiny apron of a fairy girl-child who loved my flowers; and the woodbine on the high fence behind them came from the brookside where the tough boy and the girl-child and I went after minnows. The boy is worshipping the fairy now, and here grow the white pinks and the sweet rockets and the woodbine in remembrance.

Of course, such queens of the garden as the six-inch dahlias and hybrid gladiolus, such pictures as the blue larkspur and Madonna lilies and Shasta snowbank do not 'come' except in exchange for very hard cash. Neither do Persian cats and blooded bulldogs. But with the blooming of these modest ones the loves and memories in them bloom anew each summer-time, and they are dearer than the florist's dearest rarities. As for rescuing the graceful, grateful lesser ones from the highways and byways and darkest woods, if they will persist in holding up pleading hands and faces that need washing every time I stir abroad, seeking sanctuary with me as does every homeless kitten and tramp dog in the valley—what else is to be done?



The Garden in the Foot Hills of the Adirondacks

(Continued from page 316)

cents and engaged all future crates they might get. So far I have used four and the effect is wonderful. Flowers of every color look well against that twisted bark fence, which I put as a background for the borders.

Looking down my garden the effect is yellow, looking up, pink and white. Below the middle rustic arch are two beds filled with larkspur and iris, and further down I have shrubs on either side. The entrance arch is covered with a Japanese climbing rose, and to emphasize the approach I have planted five small arbovitae on each side. Directly across, join-

You can safely rely upon a heating equipment that has furnished 200,000 homes with adequate healthful, economical heat during the past 35 years.

That is the record for Pierce Boilers and Radiators which today offer a perfect application of steam or hot water to the problem of home heating. Every heating condition is successfully covered in the Pierce line of boilers.

Any house, no matter how it is built, what it is built of, where it is located, or what its size or arrangement may be,

Pierce, Butler & Pierce Mfg. Co., 242 James St., Syracuse, N. Y. (Showrooms in Principal Cities)

can be made comfortable with the least trouble and cost by means of a Pierce System—properly installed.

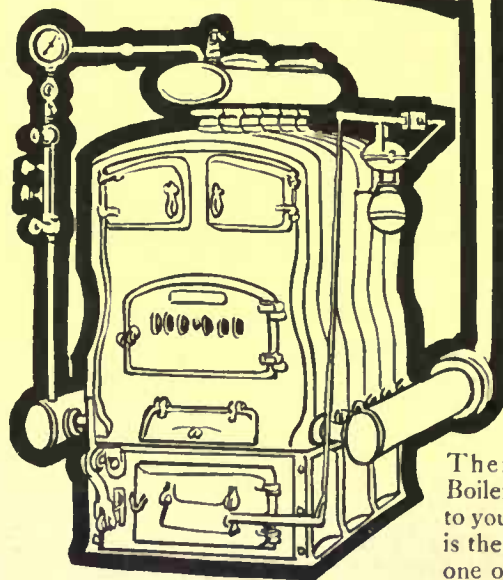


"What Heat for Your House?"

A Primer on HEATING

Send for it and read it. It contains information that everyone should know before deciding upon a heating equipment.

Mailed free to all who are interested.



Pierce Boilers and Radiators



PIERCE MARK

There is a Pierce Boiler exactly suited to your needs. This is the "American"—one of 200 styles.

The Morris Nursery Co.

WEST CHESTER, CHESTER CO. PENNA.

ESTABLISHED 1849

Over 250 Acres in Fruit, Ornamental and Evergreen Trees, Shrubs, Vines, Roses, Perennials, etc.

Write for Price List and Catalogue

LANDSCAPE WORK A SPECIALTY

SILVER LAKE A Sash Cord

(Name stamped indelibly on every foot)

The man who builds a house without asking about the sash-cord to be used is laying up trouble for himself. Insist that the specifications mention SILVER LAKE A. Its smooth surface offers nothing on which the pulley can catch. Guaranteed for Twenty years.

Write for Free Booklet,

SILVER LAKE COMPANY

87 Channee St.,

Hoston, Mass.

Makers of SILVER

LAKE solid braided

clothes

lines.





SPECIAL DESIGNS

of Corbin hardware for fine homes give an effect of individuality and exclusiveness.

Send for publication OK17, Corbin Colonial Hardware.

P. & F. CORBIN
New Britain, Connecticut

P. & F. CORBIN
of Chicago

P. & F. CORBIN
of New York

P. & F. CORBIN
Philadelphia



THREAD and THRUM RUGS 16 FEET

are made seamless, of pure wool or camel's hair, in any width up to 16 feet and in any length, color or combination of colors. 65 regular shades—any other shading made to match.

Send for color card and name of nearest dealer.

Thread & Thrum Work Shop
Auburn, N. Y.

"You choose the colors, we'll make the rug."

IRON AND WIRE FENCES

Fences of all descriptions for City and Suburban Homes. Write today for our Loose Leaf Catalog, stating briefly your requirements.

Fence Department

AMERICAN WIRE FORM CO.

100 Church Street

NEW YORK CITY

APPLE GROWING

The healthier the tree, the better the fruit. The longer trees are sprayed with "Scalecide," the more beautiful, healthful and fruitful they become. "Scalecide" is the acknowledged leader of all soluble oils—the only one containing distinct fungicidal properties. "Scalecide" will positively kill all soft-bodied sucking insects without injury to the tree. Let us prove these statements. Send today for free booklet "Scalecide—the Tree Saver." Address B. G. PRATT CO., Mfg. Chemists, 50 Church St., N. Y. City.



Enjoy An Open Fire

this winter, but get the benefit of the heat usually lost up the chimney. By its simple but unique construction a

Jackson Ventilating Grate

will warm one or two rooms on one or different floors and ventilate them without drafts. Send for our illustrated catalog.

E. A. JACKSON & BRO., Incorporated
52 South Beekman St., New York

ing the trees, I transplanted some wild barberry.

I rather coax along plants that do not mind a clay soil, of which there are a number, such as hollyhocks, pinks, larkspurs, columbine, and others. In spite of the northern climate, no one, I am sure, after June, can boast of more glory than I. When I realize the hundreds of dollars that are spent on gardens and the feeling so many have of not being able to afford one, and see the delightfully pleasing effect I have produced with so little outlay, I only wish I could help others toward the possession of a little garden, that they may know this source of unending pleasure.



Planning the House and the Garden Together

(Continued from page 300)

Of course in the case of a large country place the problem, because it is more complex, is usually handled less fearlessly by the average owner, because the difficulties are more apparent. At the same time it is well to insist on the fact that the best results are to be obtained by a cheerful co-operation between the owner, the architect and the landscape designer. To obtain this result it is always best to consult with your architect *before* the selection of the landscape designer in order to insure the selection of men who can work together in harmony.



Experiences with House Plants A Symposium

(Continued from page 295)

its place in the dining-room and put on its stand, which has on top of it a galvanized iron pan, painted green, sixteen inches in diameter and two inches deep, which serves as a receptacle for the water that drains out after watering. This reserve is held there to be absorbed as needed before the next watering. Each plant is operated on and cared for in just this same way, and by the first week in May they are growing beautifully and ready to be put on the veranda. From this time until October they are thoroughly watered every twenty-four hours, but never until the sun has entirely gone down, and once a week one tablespoonful of ammonia to the gallon of water is used at watering. The growth is so rapid that soon the newly developed fronds almost entirely cover the pots and touch the floor. By the last of October brought back into winter quarters and given all the air possible until freezing is feared, and even in the cold winter doors are left open sometime each day. No special attention is ever paid to the exact temperature of the room they occupy. We just make an effort to see that they do not have any extreme heat

LEAVENS FURNITURE



Repeated orders from satisfied customers, and their frequent letters of commendation place Leavens' Made Furniture in a class by itself. It is furniture that meets every requirement of the particular purchaser. A large variety of styles, all good, and each purchaser's individual taste in finish, insure the measure of satisfaction that has resulted in a marked increase in sales during the past year.

Leavens' Made Furniture is designed on the plain, simple lines that give style and character. It is strong but not clumsy. Each piece has individuality. An inspection of unfinished stock in our ware-rooms shows how good is the material, and how honestly it is built. It is finished to your order if so desired.

A package of over two hundred prints and a color chart will show you possibilities for every room in your house. Send for them.



WILLIAM LEAVENS & CO.

MANUFACTURERS,
32 Canal Street, Boston, Mass.

SAVE YOUR TREES

They are too precious to lose. Get expert surgeons to examine them and advise you as to what they need. Avoid tree fakers and tree butchers. Our free booklets explain tree surgery, the science founded by John Devey. Write for them.

The Devey Tree Expert Co., Inc., 4510 Acorn St., Kent, Ohio

Smoky Fireplaces Made to Draw

Your particular chimney problem studied by experts, and estimates given without charge. The work is undertaken with this understanding: **We will not accept payment unless successful.** Kitchen ventilating systems, preventing cooking odors.
FREDERIC B. WHITLEY Engineer and Contractor
215 Fulton Street, Brooklyn, N. Y.

or extreme cold. While indoors, ferns are injured, I have found, by over-watering. If they are kept as a beautiful decoration all winter, they should not be watered until they have entirely absorbed all water drained through from the last watering into the under-pan, and the soil looks a little dry on top. February is the rest month, and they should not be watered more than once thoroughly in that month.

My ferns are so large, they are never moved during the winter months, only to turn them every two weeks, so that all sides may have the direct rays of light. Care is taken to make as little dust as possible, as the only showers of water they ever get are secured at the time of transplanting and during the summer, when all the plants are lifted off the verandas to enjoy two or three gentle summer showers. In the country they do not have the dust to collect on them as they do in towns and cities.

With healthy plants to begin with, these directions should bring successful results to those who wish to grow the Boston fern.

EDNA COULTER.



Homes that Architects Have Built for Themselves

(Continued from page 303)

holding clothes, but now promoted to the rôle of a writing-desk; Indian temple hangings, Chinese candlesticks, a Norwegian wooden horse collar acting as a mirror frame, and pipes from all corners of the globe.

The remainder of the house may be considered as stereotyped, unless electric washing and ironing machines in the laundry are deemed unusual.

Such is one architect's home; and, if it is a poor thing, it is at least mine own.



The Case for Hot Water Heating

(Continued from page 315)

At least five dollars per year should be allowed on repair account for the items mentioned, making the total yearly expense for steam heating \$99.50.

A hot-air heating apparatus for such a house should cost exclusive of any special features in the interest of ventilation not less than \$250, the interest on which is \$15. For a performance with this type of apparatus that will measure up, even approximately to the results obtainable in hot-water heating, at least fourteen tons of coal will be required, or a yearly expense for fuel of \$84. In the matter of repairs not common to hot-water and steam-heating apparatus fire pots and many other parts of a furnace are comparatively short lived. A yearly allowance of five dollars for repairs and five dollars for rapid de-



THERE is money in apples. If your orchards don't pay something is wrong. Send for one of our expert orchard men and he will tell you how to make your trees good dividend payers.

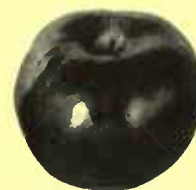
New York folks are this very day paying five and ten cents apiece for apples. The same kind of apples you could produce if your trees were in top-notch condition.

Why don't you have them put there? We can do it for you. Not in any mystic way, but just common sense pruning, repairing, spraying



The apple on the left grew on a tree receiving the usual orchard care, which is practically no care. It is small, unevenly colored and badly scarred by insects.

The right hand one is of the same variety, picked from a tree cared for Munson-Whitaker's way. It is a big, beautiful specimen, free from blemishes and having a delicious flavor that brought a retail price as high as 12c apiece in New York. It only goes to show what right care will do.



and feeding. But common sense is the most uncommon—

So are men who know how to develop an orchard. We have the uncommon kind. Send for one of our experts. He will tell you about our work. Send for booklet "Trees—The Care They Should Have."



Munson-Whitaker Company FORESTERS

Boston—623 Tremont Bldg. New York—823 Fourth Ave. Bldg.
Pittsburg—743 Oliver Bldg.



A Smart Little Country House at Glencoe, Ill.

Made better to look at, and better to live in, by Casements—the window which our simple and perfect new devices have made the best by far for the home.

**THEY GIVE THE HOME LOOK
THEY REALLY VENTILATE
NO STICKING OR RATTLING
NO SCREEN TROUBLES
NO CURTAIN TROUBLES**

Send for free booklet

The Casement Hardware Co.
175 N. State Street Chicago, Ill.

HOWARD Dustless Duster

(25 Cents Prepaid)

Makes possible a dustless home. Write for our Dust Book "A" and small free sample.

It will show you how to make dusting a pleasure, how to dry clean a silk skirt in five minutes, how to clean windows in a twinkling, to polish pianos and highly finished furniture, to make cut glass sparkle like diamonds, to make an old derby look like new.

Money back if not satisfactory
HOWARD DUSTLESS DUSTER CO.
164-43 Federal Street, Boston, Mass.

HOWARD



"No Oil to Soil"

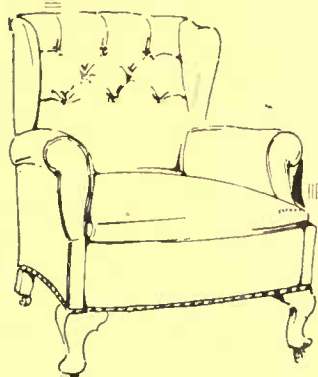
FLINT'S FINE FURNITURE

UNEXCELLED FOR RELIABILITY
AND MODERATE COST

In Library, Living Room or Den the fireplace is naturally the central point in the general scheme of decoration. Whatever else may be sacrificed to convention or economy, the hearth must have its Easy Chair or Davenport before the fire.

From the collection of Leather, Tapestry and Velour Upholstered pieces which we have now on view, it is easy to select old-time "Wing Chairs," "Club Chairs," Rockers or Davenports adapted to the fullest comfort, and at PRICES WITHIN THE PURCHASING POWER OF ALL.

Our TRADEMARK and SEVENTY YEARS' REPUTATION is your GUARANTEE.



GEO. C. FLINT CO.

43-47 WEST 23rd ST.

24-26 WEST 24th ST.



preciation is not excessive, hence the yearly expense of hot-air heating will be \$109.

As an investment a heating apparatus engages attention to the same financial considerations that relate to any form of investment from which a return of the money invested is expected.

Inversely a penny saved is a penny earned.

Hot-water heating costs per year, \$82.50; steam-heating, \$99.50 and hot-air heating, \$109.

It will be of interest to consider why one type of apparatus requires more fuel than another. Heat, like gas, provisions, electricity, clothing, etc., has a unit of measure and it is convenient to consider it by its unit of measurement as we do the cubic feet, pounds, gallons, watts, yards, etc., of other commodities.

Manufacturers of boilers or heaters publish capacities in their catalogues, which are expressed in the number of square feet of radiating surface the heaters are competent to supply, and it is ostensibly the object of the manufacturer to name the capacity of each boiler which will most accurately express its maximum efficiency, i. e., its greatest capacity for doing work when it is utilizing the largest percentage of the total heat units generated from the fuel burned in it.

Engineers who design heating systems usually base their calculations upon the heat units necessary to warm the rooms to 70 degs. in zero weather.

The burning of coal in the domestic heater is usually accomplished at temperatures ranging from 1000 degs. Fahr. to 2000 degs. Fahr. and the percentage of heat units thus generated which are transferred from the fire to the water surrounding the fire determines the efficiency of the heater.

The material (cast iron) of which steam and hot-water heaters are usually constructed, is the same and therefore does not affect the present calculation.

The rapidity (consequently the quantity) of heat transmission from one medium (fire) to another (water) through an intervening substance (iron) is directly dependent upon the difference in the temperature of the two mediums.

In steam heating the water surrounding the fire is never less than 212 degs. Fahr. In hot water heating the average temperature for the season, of the water returning to the heater will be less than 120 degs. Fahr., which makes almost 100 degs. greater difference in transmission activity in favor of hot-water heating.

In the hot-water heating of the house referred to above, to 70 degs. Fahr. during zero weather, there will be required 108,000 heat units per hour to maintain the 70 degs. temperature of the rooms and 6363 heat units per hour for warming the air supplied by the indirect radiators; a total of 114,363 units per hour delivered into the rooms; and this quantity of heat net, is all that it will be necessary to produce from a hot-water heater.

Your tires wear longer.

And whole car looks spick and span after tires are coated with

French's London White

"Whitire"
(Trade Mark)

Universally endorsed by those who take pride in the appearance of their cars.

Quickly and easily applied.

\$1.00 Size Can, sufficient for 5 months.

Write today for Special Trial Can enough for 4 tires **25c.**

This offer is limited

Samuel H. French & Co.,
411 Callowhill St.,
Philadelphia,
Pa.



MURRAY & LANMAN'S Florida Water

"THE UNIVERSAL PERFUME"

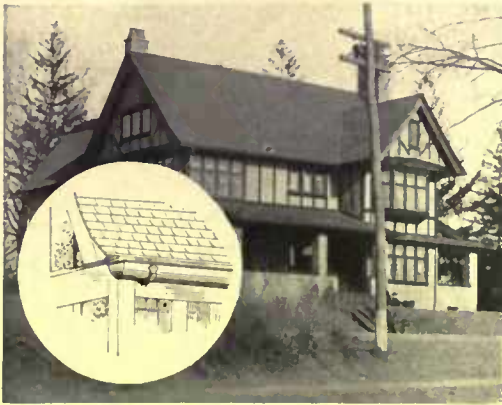
Has a distinctive invigorating quality, a rich and permanent fragrance, which distinguishes it from every other toilet water, and appeals to all people of taste and refinement. Its use transforms the daily bath into a luxury and a delight. It is the best thing to use after shaving and purpose; an actual necessity in every household.



ACCEPT NO SUBSTITUTE!
SOLD BY ALL LEADING DRUGGISTS

Sample mailed on receipt of six cents to defray mailing charges.

LANMAN & KEMP, 135 Water Street
New York



Although cast iron, these indestructible gutters do not look any heavier than one of tin or copper. They are made in two styles. This is the hanging one. The moulded face is more ornamental.

PUT THIS GUTTER ON YOUR HOUSE

IT IS INDESTRUCTIBLE

THE gutters on your house being up out of reach and out of sight you can't tell whether the paint is on or off, and first thing you know they are leaking and the side of your house is all streaked.

You endeavor to get every other part of your house as lasting as possible, so why make an exception to your gutters—one of the most important of items?

England has experimented with this kind of gutters we make for two centuries or more. So you are not endangering your house by trying out some new fangle thing.

They are made of cast iron. A high grade iron cast smooth, straight and of uniform thickness. They will outlast the best copper gutter you can buy, and won't begin to cost as much.

They form an ornamental feature of the eave—are easy to erect—need no repairs.

Let us send you short lengths of each kind of gutter at our expense. We want you to see the gutter itself, and we will leave the rest to your sense of the practical.

Send for circular and along will come the gutter lengths.



Half Round gutters are made in 6 feet lengths and in two different sizes.

HITCHINGS & COMPANY
Spring Street Elizabeth, N. J.

With hot-air furnace heating it is usual in the best practice to limit the velocity of hot air entering the rooms through the registers to about four feet per second. The house in question should have a total free area of registers of about three and one-half square feet. With the above area and velocity the furnace will deliver into the house 50,400 cubic feet of air per hour. This volume of air must be heated from 0 degs. to 70 degs., the temperature of the rooms, and such heating will require 64,120 heat units. In addition there must be supplied 108,000 units to maintain the 70 degs. in the rooms against the usual losses, making a total demand upon the furnace for 172,120 heat units per hour.

Assuming the efficiency of the hot-air furnace in producing heat from coal equal to that of the hot-water heater and that 8,000 heat units per pound of average quality of coal is the amount of heat delivered to the rooms, then we determine that it will require 14.3 lbs. of coal per hour for hot-water heating and 21.5 lbs. of coal per hour for hot-air heating.

It will be well to note that the volume of air required to convey the heat from the furnace to the rooms, as above, will need to be heated to a temperature of 131 degs. Fahr., which is as high a point as consideration of health will permit. A smaller volume of air at a higher temperature would be pernicious.

Another important point of difference between hot-water and hot-air heating is that the air entering the room through the register flows almost directly to the ceiling and has but little effect upon the cooler strata of air near the floor. The hot-water radiator induces a flow of the cool air near the floor toward itself, and heats it, thus contributing to more nearly equal temperatures at the floor and ceiling of the room.

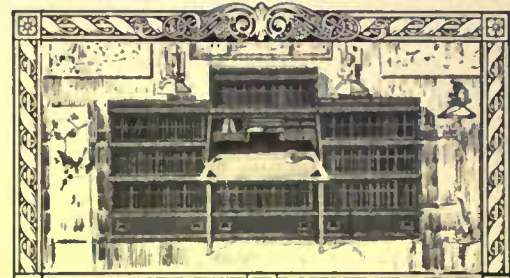
A point of advantage in hot-water over steam is that in the former method moderate temperatures of the water will serve both direct and indirect radiators at the same time, but with steam at 212 degs. and no gauge pressure, the direct radiators may be sufficiently heated, and the steam will have no appreciable effect upon the indirect.

In the relative acceptability of the hot-water, steam and hot-air apparatus in their adaptability to the structural, architectural and decorative features of the house, one is confronted with the problem of providing spaces for registers or radiators as the case may be.

In the matter of locating them so as not to displace the rugs, the radiator being much narrower than the register, its position next the wall seldom interferes, while the floor register does.

The pipes of the hot-water system are readily concealed within the walls without special structural provision or cutting important timbers of the frame, which is nearly always necessary in providing spaces for the large caliber hot-air pipes.

In the earlier piping methods employed,



Adjusting themselves readily to any nook or corner of the home—harmonizing perfectly with the decorative scheme of any room—Globe-Wernicke Bookcases ornamentally fill spaces in your home that would otherwise be bare and unattractive.

Section by section they grow as the number of your books increase—and each section is always complete in itself at any stage of its development.

Yet beauty and adaptability are only features—the real function of

Globe-Wernicke Bookcases

is the convenient, satisfactory care of books. Their utility is in their ease of expansion—growth—with and to accommodate the accumulation of your books.

Globe-Wernicke Bookcases are sold by authorized dealers in all leading cities and towns, at prices that are the same to every purchaser. The maintenance of uniform prices is the best proof of their intrinsic worth and superiority.

Where not represented, goods shipped on approval, freight prepaid.

Complete catalog and a copy of "The Blue Book of Fiction" by Hamilton W. Mabie, containing lists of the world's best stories published in English, mailed on request. Address Dept. H.G.

The Globe-Wernicke Co. Cincinnati

Branch Stores:

New York, 390-392 Broadway Boston, 91-99 Federal St.
Philadelphia, 1013-1014 Chestnut St.
Chicago, 331-335 Wabash Ave.
Washington, 1213-1220 F St., N.W.
Cincinnati, 123-134 Fourth Avenue, East

SunDialShop

Antiques
Interior Decoration



MRS. HERBERT NELSON CURTIS

23 East 34th Street

NEW YORK CITY

TELEPHONE 2970 MADISON

SUN DIALS

Any Latitude

A Beautiful Illustrated Booklet, "WHERE SUN DIALS ARE MADE," sent upon request. Estimates furnished.

E. B. MEYROWITZ, 101 East 23d St., New York
Branches: New York, Minneapolis, St. Paul, London, Paris

COMFY Footwear



The Peerless

A Comfy-Felt slipper, trimmed with ribbon in colors to match. Very handsome and of course very "comfy."

Women's, Black, Red, Brown, Light and Dark Gray, Purple, Wine, Old Rose, Lavender, Taupe, Pink, Wistaria and Light Blue..... \$1.50 Delivered



Picture Comfys For Children

Dutch Kids and Rabbit..... Brown, Blue
Clown..... Red, Pink, Light Blue
Misses' \$1.25, Child's \$1.10 Delivered



The Tailor-Made

Women's, Navy Blue, Light and Dark Gray, Red, Wine, Brown and Black... \$1.25
Men's, Red, Brown, Navy Blue, Dark Gray... \$1.50 Delivered

Send for our handsome Illustrated Catalogue No. 46, showing many new styles.

Dan'l Green Felt Shoe Co.

110-112 East 13th St., New York

Landscape Gardening



Prof. Craig

A course for Homemakers and Gardeners taught by Prof. Craig and Prof. Batchelor, of Cornell University.

Gardeners who understand up-to-date methods and practice are in demand for the best positions.

A knowledge of Landscape Gardening is indispensable to those who would have the pleasantest homes.

250 page Catalog free. Write to-day.

THE HOME CORRESPONDENCE SCHOOL
Dept. 226, Springfield, Mass.

and with the crude, ugly designs, then common with radiators, much was left to be desired from the esthetic standpoint. Today, however, design and decorative coloring of radiators make them notes in the general harmony of the room.

There is scarcely a space of any shape or dimension in a room (the general arrangement of which has been designed without reference to heating) but can be utilized for the reception of one of the hundred shapes, sizes and designs of the modern radiator.

While the window seat is only one of the means whereby a radiator may be wholly out of sight, a little personal attention on the part of the architect and some exercise of his professional ingenuity will evolve new possibilities.



The Time to Purchase Palms

ONE of the best seasons to buy palms for house culture is in the early fall, before cold weather has set in. Then there is less danger from exposure, and the plants have time to become well acclimated before the trying experience of a long winter in a tightly closed house. Oftentimes palms are forced rapidly for winter selling, which means that they are kept in a high temperature. As a result, they suffer when transferred to an ordinary living room.

The palm should not be kept in full sunshine in summer, but will be grateful if allowed to stand out of doors in a gentle rain. Indeed, it is a good plan to give the palm an occasional spraying with tepid water at all seasons.

Palms must be kept out of a draught, and it is well to avoid pots which are unduly large, as all palms do best when there is not a large amount of earth around the roots. It is advisable to loosen up the earth occasionally and to see that the water applied soaks through all parts of the soil. Palms need an abundance of water, but abhor wet feet—water must not be allowed stand in the saucer.



The Making of a Walled Garden (Continued from page 310)

and leaf mold should be used just as if it were mortar, except that it is advisable to use small stones or pieces of brick to keep the joints wide. When the wall is used for retaining purposes one should endeavor to make it possible for the roots to run through to the earth beyond. In mortar-joined walls interstices may be left to be filled with earth. These should be of sufficient size to support normal growth of the varieties planted.

Planting may be accomplished by means of seed or seedlings. If seeds are chosen, see that they are given a fair start. A good way to do this is to prepare a pill of



Plymouth Furs

Trade Mark

It is rarely possible anywhere in the world to obtain so large an assortment of high grade furs. Plymouth Furs differ as much from ordinary fur shop or department store styles as does the creation of a great architect differ from the cottage built by the village carpenter.

Plymouth Furs are made from selected pelts only, are individual and exclusive in design and of perfect workmanship. Each is a creation of art in itself.

Style Book R Free

Our new 1911 Style Book R is a work of art, containing hundreds of new models, illustrated by America's foremost fashion artists. It shows furs for Men, Women and Children at prices varying from \$5 to \$5000. If you intend to buy furs this season, you should have this authoritative fur manual. Sent free on request if you will state what furs interest you.

Estimates for Alteration and Renovation for Furs given free of charge

PLYMOUTH FUR CO.

125 to 165 PLYMOUTH BLDG., MINNEAPOLIS, MINN.

seeds by wrapping them in moist loam and sphagnum moss and pushing them into crevices. With seedlings, one should allow them to gain a fairly thriving growth of rootlets and carefully hollow out a place for them. Pack the soil tight, as in potting, and leave but little of the plant projecting.

There are numerous plants suitable for wall planting, but a characteristic list of those giving best service is here given.

Alyssum	House Leek
<i>Arabis albidia</i> and <i>Alpina</i>	Mill-foil, woolly leaved—
Alpine Aster	<i>Achillea tormentosa</i>
Baby's Breath	Pear, Prickly
Barnwort	Pink, Sea or Cushion—
Bearberry— <i>Arctostaphylos</i>	<i>Armeria maritima</i>
<i>Uva-Ursi</i>	Plumbago
Bugle— <i>Ajuga reptans</i>	Phlox, Trailing— <i>Procumbens</i>
Catchfly— <i>Silene acaulis</i>	Rock-ress, Purple—
Columbine	<i>Aubretia deltoidea</i>
<i>Dianthus deltoideus</i>	<i>Saxifraga longifolia</i>
" <i>silvestris</i>	Saxifrage, Mountain
" <i>plumarius</i>	<i>Sedum saxatile</i>
<i>Euonymus radicans</i>	Snow in Summer
Forget-me-not	Speedwell
Garland Flower— <i>Daphne</i>	Stone-crop— <i>Sedum acre</i>
<i>Cneorum</i>	var. <i>aureum</i>
Gypsophylla <i>cerastioides</i>	Thyme— <i>Thymus montanus</i>
var. <i>repens</i>	Yucca
Harebell	
Ferns: Ebony Spleenwort— <i>Asplenium ebeneum</i> . Dry soil mixed with leaf mold	
Woodsia. Rocky location	
<i>Pellaea atropurpurea</i> . Rocky ledges	
<i>Aspidium fragrans</i> . Dry cliff sides where anything else would be sun-scorched	
Dwarf Spleenwort— <i>Asplenium trichomanes</i> . Shade. Grows in any rock-cleft where it can find merely a foothold	
Common Polypody— <i>Polypodium vulgare</i> . A very reliable sort	

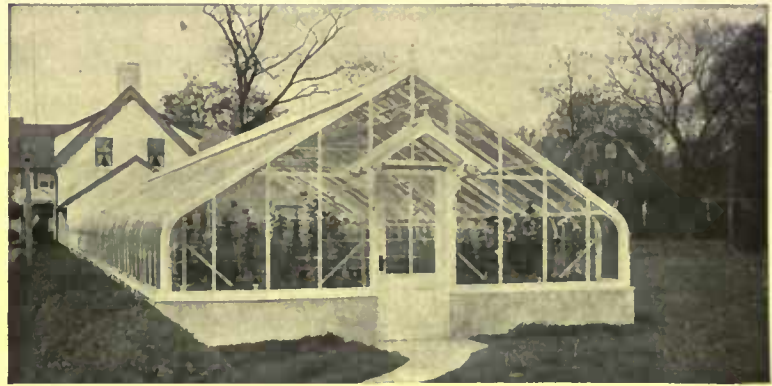


The Swiss Chalet for America

(Continued from page 292)

terior paneling there is nothing more attractive, all things considered, than redwood and to the interior plans of American chalets, architects have given fancy full play. It is a difficult matter to preserve the artistic simplicity of the Swiss interior and yet to harmonize it with the requirements of modern convenience. Yet this has been done by many builders and has made the American chalet delightful both inside and out.

In our money-governed world one must not forget the matter of expense which enters very largely into the building plans of so many people. Economy was necessary to Swiss people; consequently their architecture was on a style that cost little. And the same is true in America. One can build a Swiss chalet for a third less money than it will cost to erect a house of similar pretension in other styles. Of course one may also put a great deal of money into a chalet, so that it really satisfies all classes; but to such as want an inexpensive home that will be homelike and picturesque and will not look cheap in that worst sense of striving for an elegance one cannot afford, the Swiss chalet is, to my mind, the ideal habitation. It is a happy, light-hearted style; it is capable of an infinite variety of treatment without radical departure from its central and fundamental principles of advantage and excellence; it is strong; it costs little and endures. What more can one ask of architecture?



Build Our Curved Eave Greenhouse

Build it because it is a thoroughly practical curved eave construction. Many of them are not, you know. And yet beyond all question the curved eave house is the best house to build. Grows better flowers with less trouble because it is nearer outdoor light conditions.

That new catalog of ours explains all this so clearly, that we are going to ask you to send for one. In the same letter why not let us know something about your ideas of the size house you want and in our answer we will make you some "getting-started-suggestions."

Hitchings & Company

Spring Street
Elizabeth, N. J.

YOUR GARDEN can be improved and beautified by planting those Trees and Shrubs you thought of in the summer.

FALL PLANTING season is here. Avail yourself of this opportunity to put the finishing touch to your home.



F. W. KELSEY NURSERY CO.
Everything Worth Planting
150 BROADWAY
NEW YORK

We have the stock you want at low cost consistent with quality. Secure our Catalog.

ORDERS COMPLETE

Inquiries for Quotations etc., incur no obligation

WRITE US NOW

PLANT SHRUBS NOW

That will bloom all next year

The best twelve are Golden Bell, Japan Quince, Persian Lilac, Weigela, Syringa, Honeysuckle, Deutzia, Bridal Wreath, Japanese Briar, Hydrangea, Althea and Japanese Barberry. 1 offer all for \$3.50, by express, one of each or assorted as you desire; 6 for \$2; 24 for \$6.50. Booklet on shrubs and their care sent free.

FRED HAXTON

12 FOR \$3.50 4719 Winthrop Avenue, Chicago



GRASS GROWS ANYWHERE
LIKE MAGIC WHEN YOU SOW

KALAKA The Wizard
Lawn Producer

Needs only soil—moisture. Healthy turf and a beautiful lawn or terrace where everything else fails. Choice seed scientifically mixed with a powerful, dry, concentrated animal manure. Goes further than ordinary seed. Try it. Instructive booklet, "How to Make a Lawn," FREE—full of lawn "helps." Send for it. The Kalaka Company, 816 Exchange Ave., Chicago

NEW YORK BELTING & PACKING CO. LTD

ORIGINAL MANUFACTURERS

INTERLOCKING RUBBER TILING.

**IT IS THE BEST FLOOR MADE
FOR CHURCHES, SCHOOLS, BANKS, PUBLIC BUILDINGS,
THEATRES AND PRIVATE RESIDENCES, BEING SANITARY,
NON-SLIPPERY, SOFT AND COMFORTABLE TO THE TREAD.
BEAUTIFUL IN COLORS AND DESIGNS AND DURABLE.**

New York, N. Y., 91-93 Chambers Street	Pittsburg, Pa., 933-935 Liberty Avenue
Chicago, Ill., 150 Lake Street	St. Louis, Mo., 218-220 Chestnut Street
Philadelphia, Pa., 118-120 North 8th Street	Portland, Ore., 40 First Street
San Francisco, Calif., 129-131 First Street	Boston, Mass., 232 Summer Street
Indianapolis, Ind., 207-209 S. Meridian St.	
London, England, 13-15 Southampton Row	
Spokane, Wash., 163 South Lincoln Street	



POMPEIAN
STONE
FIREPLACE
in the residence of
Mrs. Robert Henry Traver
Washington, D. C.

Pompeian Stone offers an inexpensive substitute for Marble in the construction of the fireplace and surrounds of exact reproduction from Old World masterpieces or carrying out of original designs.

Our large illustrated catalogue N of hall and garden furniture mailed on request.

Our booklet "City Back Yards" will be of interest to city dwellers.

THE ERKINS STUDIOS, Inc.
226 Lexington Ave. New York City
Factory: Astoria, Long Island.

Interior Decoration

Interior decorations of all descriptions planned and executed. Single rooms or whole houses furnished, and wall coverings, hangings, rugs, furniture, etc., selected to suit any scheme. Out of town orders carefully attended to. Lamp and candle shades. Stenciling.

MISS THROOP—MISS VEERHOFF
37 EAST 60th STREET :: NEW YORK

Grow Dwarf Apple Trees

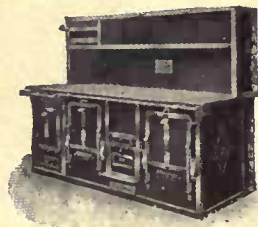
Novel, but practical, and intensely interesting. Require little room. Easily cultivated, pruned and sprayed. Bear fruit earlier than the standards. Make little shade, permitting other crops to be grown between rows. May be trimmed and trained on wire to grow in almost any shape. Suburbanites, farmers and amateur horticulturalists alike find pleasure and profit growing Dwarf Apple Trees. No garden or orchard is now complete without several of these wonderfully productive trees.

VARIETIES: Duchess of Oldenburg, yellow, striped red; Winter Maiden's Blush, red cheek; Bismarck, red, beautiful; Red Astrachan, crimson. Plant this Fall and gain a season. Prompt shipment. Send today for illustrated booklet, free.

Arthur J. Collins

Box Y

Moorestown - N. J.



A Combination Range for Every Purpose

Good for winter cooking with heating; good for summer cooking without heating—the

Deane Combination Coal and Gas Range
Two ranges in one. Has ovens, gridiron broilers, toasters and all other up-to-date features. Gas and coal can be used at the same time when preparing a big meal; or separately if desired.

Don't buy any range before calling upon us.

Bramhall-Deane Company,
261 W. 36th St., New York City
Cooking Apparatus of All Kinds.

One of our many models now in stock.
Call or Write for Our Catalog of Ranges and Butler's Pantry Plate Warmers.

A Baker's Dozen of Old English Teapots

THE old teapots belonging to the Staffordshire class comprise many colors and designs; a study of them will show thirteen varieties of shapes, handles, spouts and knobs. If color photography could have been employed to bring before the reader these rows of antiques, with hues shading from pink to the dark purplish tints of the mulberry; the light blues to the depths of the dark, rich blue of the Washington's tomb pot; the fine red, blue, green and pink floral designs on the back-



A baker's dozen of Staffordshire ware showing the different varieties of interesting teapots

grounds of white—it would make him concede the palm for good colors to the Staffordshire potters—Adams, Wood, Mayer, Joseph Heath, Wedgwood, Clews (James and Ralph), Alcock and many others. These were the men who from the latter part of the eighteenth almost to the middle of the nineteenth century made the beautiful designs which are a lasting joy to the collector. Their sphere of work was in the English villages and smaller places of Staffordshire—that clay country which has been the seat of potteries from earliest times—in Fenton, Lane End, Lane Delph, Hanley, Stoke-on-Trent, Cobridge, Burslem, Tunstall, Longport, Shelton and less well-known places, all adjoining, and which now make almost a continuous city ten miles in length. In recognition of the artistic achievements of these renowned workers in clay, who would not place their names in the Hall of Fame of potters!

Beginning from left to right in our illustration, on the top shelf of the old cupboard is a teapot in pink and white floral decorations; next comes a prettily shaped low one, with red, green and a bit of yellow in the floral pattern on a white ground; while the third is of the same white background with a floral band of pink, blue

(Continued on page 342)

Brenlin Window Shades

Look Better—Last Longest

BRENLIN will outwear several ordinary shades and will always look well.

Brenlin is supple, not stiff—and always hangs straight and smooth. It won't bag or sag—won't crack—won't fade.

Look at the ordinary shade. It is cracked and streaked, looks unsightly. This is because it was "filled" with chalk or clay to give it "body," and the "filling" dropped out.

Then look at a Brenlin shade. It has no streaks—no pinholes.



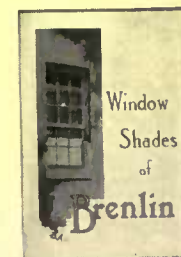
The Ordinary Shade



The Brenlin Shade

Its body is natural; there is no "filling." So there is nothing to make it crack or sag.

Brenlin is made in all colors and in Brenlin Duplex, light one side, dark the other. The possibilities of color schemes with Brenlin are almost unlimited.



Write today for this book and samples in all colors.

With the help of many suggestions in the book and samples, select your shades. Then go to any good dealer and get Brenlin. Find out why Brenlin is the cheapest shade you can put up.

Chas. W. Breneman & Co.

2069-2079 Reading Road, Cincinnati, O.

The name is perforated along the edge of every yard like this. **BRENLIN** Look for it.



HAVE ELECTRICITY IN YOUR COUNTRY HOME

Install an **Alamo-Westinghouse** electric lighting set in your house. These little plants are safe, durable, economical and do not require the services of an engineer. We also install Complete Water Systems of all kinds. All of our apparatus is guaranteed. Write for our booklet entitled "Electric Light and Power for Country Home and Farm."

ALAMO MFG. CO. - Hillsdale, Mich.
Eastern Representatives, OTIS & WELLS, Electrical Engineers, 2 Rector Street, New York City.
CHAS. PFAU, Bourse Bldg., Philadelphia.

TILES

Make the fireplace the focus of the room

Above all things the fireplace must be attractive, because it is the spot around which the family gathers.

In most cases the first reason for using tile is a sanitary one, but in the case of the fireplace it is an aesthetic one. You put tile around the fireplace for beauty. Incidentally it is a good protection against fire. You use tile because it is burnt clay, and both in color and texture suggests an association with fire.

We have prepared four booklets: "Tiles for Fireplaces," "Tile for the Bathroom," "Tiles for the Kitchen and Laundry," "Tiles on the Porch Floor," which we send free to home builders. You would do well to read them before perfecting your plans.

THE ASSOCIATED TILE MANUFACTURERS

Room 2, Reeves Building,
Beaver Falls, Pa.

CALIFORNIA PRIVET 2 ft. High, \$15 per 1000
3 1/2-4 ft. High \$25 per 1000

SAVE 50% on THESE PRICES

S. L. de FABRY, - Grower - LITTLE SILVER, N. J.

If you are a Lover of
RARE BULBS, :: NOVELTIES,
IRIS, :: PAEONIAS,
JAPAN DWARF PLANTS,
RARE FORCING SHRUBS

Send for our Catalogue which will interest you.

H. H. Berger & Co., 70 Warren St., New York

FINEST NEW DAHLIAS

direct from Holland

Last Spring we sold a large quantity of the latest dahlia creations to American flower lovers. In addition we brought over a quantity of the leading new varieties and planted them in our own grounds, outside Philadelphia, acclimating them to soil and climate. Among the varieties are the following Wonderful New Dahlias introduced by us.

The new decorative Dahlia **PRINCESS JULIANA** received an award of merit, R. H. S., London, 1910 and a first-class certificate, Amsterdam, 1909. The finest decorative dahlia ever introduced by us.

Our New Dwarf Fancy Dahlias. The ideal bedding plant, 20 inches high, literally covered with lacy Dahlias of the finest sorts for cutting purposes. 60c. each, \$5.00 per dozen.

Dwarf Mignon Dahlias. A new strain of very dwarf habit, 15 inches high; produce a profusion of single flowers, from June until frost. Received five first-class certificates and five awards of merit at Amsterdam. 75c. each, \$3.50 per six.

Send for a copy of our Dahlia leaflet. Order early, for Spring delivery, before acclimated stock is exhausted.

Gt. van Waveren and Krullijl,

American Branch House, 529 Bourne Building, Louis Berger, Mgr.
Philadelphia, Pa., U. S. A.

Home Offices and Nurseries: Sassenheim, (Haarlem,) Holland. Other Branches: Moscow, Russia; Leipzig, Germany; Buenos Ayres, Argentine Republic; London, England; Goteburg, Sweden.



"PRINCESS JULIANA"

YALE

Hardware



EVERY architect knows Yale Hardware and recognizes its superior quality.

Every house builder should have a copy of our book: "Yale Hardware for Your Home," before making any choice.

The book is free and will be sent post-paid in response to a postcard.



The Makers of Yale Products. Locks, Padlocks, Builders' Hardware, Door Checks, Chain Holes

The Yale & Towne Mfg. Co.
9 Murray Street, New York

Local Offices:
Chicago, 74 E. Randolph St.
San Francisco, 706 Phelan Bldg.
London, Paris, Hamburg



Wesley Lester Blithe, Architect, Philadelphia

Let us help you with your Color Scheme
Whether your house is half-timbered, shingled all over or rough clap-boarded, it should harmonize with its surroundings as well as being artistic in itself. Our miniature stained shingles will enable you to decide, right on the ground, which colors are best.

Dexter Brothers English Shingle Stains

do more than beautify—they protect, adding years to the life of the wood. And the colors will not fade. The secret lies in the use of the best English ground colors mixed in linseed and our own Dexter Preservative Oil.

Write for booklet and sample miniature shingles TODAY.

Dexter Brothers Co., 115 Broad St., Boston, Mass.
Branches: 1188 Broadway, N.Y., 518 Race St., Philadelphia, Pa.

Makers of Petrifox Cement Coating

Agents: H. M. Hooker Co., Chicago; F. H. McDonald, Grand Rapids, Mich.; F. T. Crowe & Co., Seattle, Spokane, Tacoma, Wash. and Portland, Ore.; E. H. Totten, Security Bldg., St. Louis, Mo.; Sherman-Kimball, San Francisco; Hoffschlager & Co., Honolulu; and dealers.

Be sure the words
Dexter
Brothers
English
Shingle
Stains
are on
every
barrel
keg and
box



Last Call

FOR SPRING
FLOWERING
BULBS

Fall forethought prevents the regrets of Spring after-thought. The season is now present for bulb planting. We offer both the usual and unusual in all leading varieties—and assure you delivery of healthy first size Bulbs.

PLANT NOW

HYACINTHS, Under Color, Red, Pink, White, Blue

60c per doz., \$4.50 per 100

TULIPS, Rickards Brothers' Special Mixed

25c per doz., \$1.50 per 100

NARCISSUS, Finest Trumpet Sorts, Mixed

25c per doz., \$1.50 per 100

We have just received a consignment of fresh Dutch Bulbs from Holland, and find it contains the choicest selection we have ever imported.

If you have yet to complete your planting for an early spring garden—don't delay longer. Send for our Fall Catalogue and price list. We have what you should have.

BRIDGEMAN'S SEED WARE HOUSE

RICKARDS BROS., Props.

37 East 19th Street N. Y. City

Be Kind to Your Trees

A few dollars rightly spent to-day insures beauty and comfort for years to come

Appleton & Sewall & Co.
INCORPORATED

Foresters and Surveyors

Old Town, 156 Fifth Avenue, Bangor
Me. New York Me.

Practical Methods of Tree Preservation
References:—Yale University, Bowdoin College,
Park Dept. City of Bangor, Me., Maine State
Forest Commission.

Write for Booklet A

Save your table Don't let spilled liquids and hot dishes spoil your handsome dining table. Protect it with a

Peerless Asbestos Table Mat

Write for booklet "To the Woman Who Cares."

Chicago Asbestos Table Mat Co., Dept 213, 215 Loomis St., Chicago, Ill.

Are you
Thinking
of
Decorating
or
Furnishing?

Talk with me. Costs nothing. May interest and help you. Put your ideas with mine; then alterations, decorations, etc., become beautiful and satisfactory. Personal supervision, town or country anywhere. Artistic results certain.

Write or 'phone me.

H. P. FREAR

18 W. 34th St., Astor Ct., N. Y., Tel. 4548 Murray Hill

EVERYTHING for the HOME GROUNDS

Oreocretal, deciduous, shade and weeping trees, Flowering shrubs, Barberry, Privet, Evergreens, Conifers, Hardy trailing vines, Climbers, Fruit trees, Berry bushes, Hardy garden plants, etc. The finest selection for lawn and garden planting in America. More than 600 acres of choicest nursery produce.

We will make a planting plan of your place, selecting trees, shrubs, etc., suitable to soil and situation, and give you the exact cost of planting and proper time to plant. Send for Catalog D.

The Stephen Hoyt's Sons Company
Established 1848 New Canaan, Conn. Incorporated 1903

(Continued from page 340)

and green running around the center of the pot.

The second shelf starts with the old Washington's Tomb Teapot (Mayer) in dark blue. This design rarely has the mark of Mayer on it, as Wood made the same design with the exception of the flowers, which are different. The figure which is seated is supposed to be that of Lafayette at the tomb of Washington and represents a bewigged man with knee-breeches, carrying a scroll. Though the print is usually known as "Lafayette at the tomb of Washington," the face is not that of Lafayette, and when General Lafayette visited Washington's tomb he wore trousers, knee-breeches being out of the fashion. It has been thought that the figure at the tomb was intended for Jefferson. The seated, solitary figure, the temple in the distance with the rays of the setting sun as a background, are the same as in the Wood pieces. In N. Hudson Moore's "Old China Book" the sugar-bowl (Mayer) which matches the teapot tomb piece (Mayer) in this collection is shown among the Staffordshire illustrations.

Next to the tomb piece comes the beautifully shaped black and white one with bunches of grapes, two strawberries and a bird with three ball-like feathers as a top-knot. Following the plan of many potters, this piece, like many others, is marked with an anchor impressed, without color or other markings to identify it (like the anchor with "R. H.," or the three anchors, like the Robert Hancock or Richard Holdship or Chelsea pieces, respectively). The last teapot on the second row is a Burslem piece (Wood) with lanbrequin-like decoration in two shades of royal blue, the cover set well down into the top of the pot. On the third row comes first a mulberry teapot with "Pagoda" and cypress trees; second, a white one with royal blue band about half an inch wide running around the concave-octagon central part of the teapot, the knob being formed by a flower pod. The marking seems to indicate it as being a Colebrook-Dale pottery piece. Another of the mulberry family, with willow trees shading the pagoda and a picturesque piece in light blue and white, completes the second shelf.

On the lower row another blue and white begins the line, "Basket of Flowers," being the name stamped on the bottom of the pot. Then comes a large pink one, which gives a fine bit of coloring of a warm tint to the middle of this shelf. The agricultural scene is very interesting, with the farmer sowing the seed in the newly ploughed ground, while the horses, plough and ploughman are distinctly seen in the distance. This teapot is the only one of the Baker's Dozen which boasts feet, which, together with its fine color floral border and ample proportions, make it a beautiful antique. In the collection of donated old china pieces in the Metropolitan

(Continued on page 344)

JUST PUBLISHED

SADDLE AND CAMP IN THE ROCKIES

By **DILLON WALLACE**

A graphic account of a two thousand mile survey of the Rocky Mountain game region on horseback, from Southern Arizona to Jackson's Hole, the last great grazing ground of the American Elk. The country traversed is in reality the last stand of the big game in this continent and Mr. Wallace's observations of game conditions constitute the first adequate and complete description of this field. **Price \$1.75 net.**

THE BOOK OF THE TARPON

By **A. W. DIMOCK**

Mr. A. W. Dimock describes with a facile pen a sport that rivals target practice, broncho busting and high diving. Were it not for the fact that the camera was always focused on the line, this "fish story" would be unbelievable. Fishermen and booksellers however have pronounced Mr. Julian Dimock's illustrations to be one of the best collections of fish pictures ever reproduced. **Price \$2.00 net.**

PEOPLE OF THE WILD

By **F. ST. MARS**

Mr. St. Mars has the rare gift of telling animal stories convincingly without ascribing human qualities to his characters. He presents in beautiful English the drama of life in the woods, and hills and along the shore, with the interweaving of hate, hunger and revenge. **Price \$1.25 net.**

THE TWO-GUN MAN

By **CHARLES ALDEN SELTZER**

The story tells of an attractive young girl from the East who comes to complicate life on the cattle range, a gun fighter who is hired to kill her brother, and a range boss who plays a little game of his own. The action is swift from the first page to the last. **Price \$1.25 net.**

Look them over at the Book Store
Send a post card for complete catalog

OUTING PUBLISHING COMPANY
OUTING MAGAZINE yachting
315 FIFTH AVENUE NEW YORK CITY-1112 PEOPLES CAS BLOC. CHICAGO

BUNGALOWS

THE one book that really covers the whole fascinating problem of building the summer home, with a profusion of illustrations chosen from among hundreds of available photographs and plans. It would be folly to build any sort of a camp, vacation shack, or a temporary home without its aid and suggestions.

McBride, Nast & Company
31 East 17th St. New York

Get a Boat of Your Own AND JOIN THE FLEET



The Boat Buyer

ISSUED QUARTERLY — INITIAL
NUMBER READY DECEMBER 1st

Published for the boat owner and the man who wants to become one, will tell you how inexpensive the sport of boating really is.

It starts you right in the selection of craft, engine and equipment—tells you just what kind of boat is best adapted to each specific sort of requirement, what type of engine is best suited to each type of boat.

McBride, Nast & Co., 31 E. 17th
St., New York City. Enclosed find
50 cents. Send me the BOAT
BUYER for one year.

Name
Street and Number.....
Town and State.....

To the man who wants to know
the "why," "wherefor" and "how
much" of the boating game—the
BOAT BUYER is a godsend.

Fill out the blank, mail with 50c
and receive the BOAT BUYER for a
whole year.

Establish Tulips Permanently Among Annuals or Shrubbery

You know and love tulips as a class—but do you fully appreciate the possibilities offered you in the Darwin and May-flowering types? They can be left permanently just where you wish them to grow—in shrubbery borders or flower beds—and will increase in number for many years. They bloom after the early bulbs—thus providing you with lovely flowers from early to late. In form and coloring, they leave nothing to be desired.

You need some of them; we can supply you to the best advantage, because our connections

Maiden's Blush or Picotee

Clear white, edged with pink, petals beautifully curved. After a few days, the flower turns to deep rose—giving it a totally different appearance. A most unique and charming flower, standing well when cut. (See illustration below.) Per dozen, 25c; per hundred, \$1.50; per thousand, \$14.00.



with reliable growers abroad are unexcelled. Boddington's Quality Bulbs are planted on many famous estates. We offer splendid collections, including some of the choicest of the Darwin type. We cannot list all of them here, but you may be fully assured of their high quality.

Boddington's Special Collections of Darwin Tulips

1 each of 26 choice sorts, \$2
3 each of 26 choice sorts, 78 in all, \$5.75
6 each of 26 choice sorts, 156 in all, \$11
12 each of 26 choice sorts, 312 in all, \$20

Complete descriptions given in

Boddington's Summer and Autumn Garden Guide

Free—send postal today

Arthur T. Boddington
Seedsman

Dept. H, 342 West 14th Street
NEW YORK CITY

Art and Progress

A MONTHLY ILLUSTRATED MAGAZINE

PUBLISHED BY

THE AMERICAN FEDERATION OF ARTS

1741 NEW YORK AVENUE, WASHINGTON, D. C.

BEAUTIFUL ILLUSTRATIONS

THE BEST WRITERS

SPECIAL FEATURES

*A Layman's Magazine of Art upheld to a professional standard.
It treats of Painting, Sculpture, Architecture, Civic Art,
Landscape Gardening, the Handicrafts.*

Sample Copies, 10 cents

Subscription Price, \$1.50 a Year



Can of Galilee, back over the hill from Nazareth

The Big Travel Book of the Year

Dr. Louis Gaston Leary's

THE REAL PALESTINE OF TO-DAY

Those who have followed Dr. Leary's articles in recent issues of TRAVEL need no assurance as to the real gripping interest with which he clothes the people, the customs, and the landmarks of this tiny land that is "Holy" to Jew and Christian and Moslem. His residence for a time in Beirut gave opportunity for an unusually thorough study of the people themselves—their mode of life, their customs and prejudices, and this side of the subject is one that always will have the widest appeal. Dr. Leary's intimate knowledge of the country's legends—those that are well substantiated and those that are merely amusing—helps to make the book as entertaining as the best fiction.

The book is of a convenient size—5¼ x 7¾ inches. Bound in dark blue linen boards with a charming cover design by George Hood. There are 64 pages of illustrations, besides maps of the whole country and important sections of it at larger scale. Price, \$1 net, postage 8 cents.

McBRIDE, NAST & CO., Publishers, 31 E. 17th St., N. Y.



Buy Hicks Shrubs Now

This Ad. Tells You Why Planting Now Is Best

There are four main and several minor reasons why Fall planting of shrubs is best.

First: The ground gets settled around their roots so they start growing vigorously first thing next spring; and you know it is the long vigorous growths that arch gracefully and give the most beautiful effects.

Second: Many of the shrubs either bloom or bud out so early in the spring that if planted after April 15th they are bruised or broken off, and although the growth starts a little later, it is not so vigorous until mid-summer. This is particularly so of Forsythia, Pearl Bush, Lilacs, and Spireas.

Third: Many of the shrubs are beautiful all winter and you might just as well be enjoying them during those dreary months. For instance, there is Red Twigged Dogwood, the bark of which is a glowing carmine. Japanese Barberry, with its brilliant red berries which stay on all winter, is unequalled for low mass effects or hedges.

Fourth: Next spring you and everybody else will be too busy. You know how it has been every other year—almost impossible to get what you want done, when you wanted it done. Besides, now, while your needs of the past summer are fresh in your mind, is the best time to order.

Isaac Hicks & Son **Westbury, Long Island**

(There are a few things which we recommend to reserve until spring; Azalea, Magnolia, Beech, Liquidambar or Sweet Gum, Tulip Tree and Rhododendron).

That Privet hedge you have long wanted might just as well be planted right now—it's a simple straight ahead sort of a job that will only hold up other things if put off till spring.

A mass planting like this will take about 50 shrubs and cost less than \$20.00. We supplied them and they all thrived.

Shrubby, as you know, is the most economical quick way of massing the foundation of a house. In the picture above they have been allowed to grow a little too high, interfering with the breeze entering the windows. The taller Upright Honeysuckle and Syringa, at the back should be taken out and the Thunbergia Barberry allowed to occupy more space. The Rosa Rugosa should be cut down and allowed to grow up again, which makes it more dense. The stepping stones in the grass illustrate a good idea that should be more widely used. They cut up the lawn less than a path and the lawn mower runs over them, which insures neatness and economical maintenance.

Don't you want some especially fine Golden Bell, Upright Honeysuckle, Syringa, or Mock Orange, and Viburnum Dentatum? Or, have you spots where you have planned to put Weigela, snow ball bush, or sweet shrub, that old fashioned favorite with its unforgotten perfume? Hicks' shrubs, like Hicks' trees, are strong, sturdy, well developed stock that you can thoroughly depend upon. Dependable shrubs from a dependable firm.

Come to the Nursery and pick them out. If you cannot come, then send for price list; you will find the prices low.

Send your order, and we will fill it carefully and promptly with freshly dug stock.

Now is also the time to plan winter tree work; such as moving big evergreens ten to forty feet high. Have Hicks move them for you.

(Continued from page 342)

Museum of Fine Arts, New York City, it was recently a pleasure to see the pink sugar bowl which matches this pink teapot. How fine they would look side-by-side!

Last but not least comes the very fine china teapot in white with gilt spring decoration and charming outlines. A good contrast in its delicateness of tone with its gayer neighbors and a fine finish to the Baker's Dozen. Thirteen cherished possessions! "How did you get so many and such beauties!" is the exclamation of the beholders. Like Topsy, they "grewed"; not in a night, for by day three friends have made "red-letter days," each by bringing an offering of a teapot to add to my collection—long enriched by the Washington's Tomb and the pink Agricultural ones (two shrines for a score of years in my china cupboard). Others were bought from the shelves of antiquarians and were carried home by hand, riding in the cars with moments of fearful anxiety. These add beauty and grace to my lovely family of growing teapots. More are on the way and the next family group will contain a score—then twenty-five will be coveted, and who can say how many shall yet be numbered mine!

JOSEPHINE RICE CREELMAN.



Book Reviews

[The Publishers of House and Garden will be glad to furnish any books desired by subscribers on receipt of publisher's price. Inquiries accompanied by stamp for reply will be answered immediately.]

Dustman's Book of Plans and Building Construction. By A. M. Dustman. Illustrated. Cloth 9x13, 239 pp. Chicago. Charles C. Thompson Co. \$2.00.

The interesting period preceding the actual building of a home is full of an enthusiasm for knowledge. To make some of the mysteries of the architects' profession clear to laymen several books have been published. The above named book contains information making architectural terms, estimating, cost of materials and construction, specifications and kindred subjects intelligible. A considerable portion of the book is devoted to suggestions, pictures and plans of homes, barns and outbuildings which are helpful to the prospective builder.

Detached Dwellings, Part II. Illustrated. Cloth, 9x12 inches. New York. The American Architect. Price \$5.00, postpaid.

The best work of American architects to-day is by no means limited to the large public buildings in the big cities, but considerable of it is to be seen in the residences of those who live in the country and the suburbs. Detached Dwellings, Part II, is a book of illustrations that would show the truth of this. It includes pictures and plans of houses the majority of which equal the homes of England's landed proprietors. In addition to the numerous half-tone reproductions, the



NO DELAY TO GET THE CLOTHES DRY ON WASH DAY

When using the "CHICAGO-FRANCIS" Combined Clothes Dryer and Laundry Stove. Clothes are dried without extra expense, as the waste heat from the laundry stove dries the clothes. Can furnish stove suitable for burning wood, coal or gas. Dries the clothes as perfectly as a sunbath. Especially adapted for use in Residences, Apartment Buildings and Institutions. All Dryers are built to order in various sizes and can be made to fit almost any laundry room. Write today for descriptive circular and our handsomely illustrated No. 12 catalog. Address nearest office.

CHICAGO DRYER CO. OR SHANNON MFG. CO.

630 So. Wabash Ave., CHICAGO, ILL.

124 Lexington Ave., NEW YORK CITY

FALL PLANTING

Horticultural Authorities now agree that Fall Planting is best for fruit and deciduous trees and shrubs.

We have a full line of maples, poplars, flowering shrubs, fruit trees, etc., on which we will make very low prices.

For Catalogue and Special Price List address

WADLEY NURSERIES - - - Bound Brook, New Jersey



Illustration
is of No. 100

There is nothing more fascinating to the average man or boy than

Tinkering with Tools

and for the man who is really handy with tools a present of one of our Combination Benches and Tool Cabinets will give him more pleasure than anything else you could select. It is a handsome oak cabinet containing 95 of the finest tools made and when open is a complete bench with vise ready for immediate use.

For one less expert, or for the boy, we suggest one of our smaller cabinets. All tools are the highest grade standard mechanics' tools, arranged in convenient sets for home use. The quality is the same in all. The higher priced cabinets are larger and contain more tools.

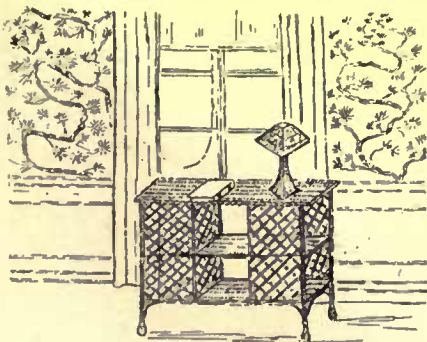
This Christmas or this Birthday give him one of our Combination Benches and Tool Cabinets, or a smaller Tool Cabinet and a Manual Training Bench.

No. 47	21 Tools	. . \$ 7.50
" 52	24 "	10.00
" 53	36 "	15.00
" 54	40 "	20.00
" 55	52 "	30.00
" 100	95 "	85.00

We are pioneers in the sale of high-grade tool outfits for home use; every set bears our guarantee of quality.

Order direct (we have no agents) or send for Catalogue No. 2952.

HAMMACHER, SCHLEMMER & CO., NEW YORK SINCE 1848 4th Ave. and 13th St.
HARDWARE, TOOLS AND SUPPLIES



WILLOW FURNITURE THAT IS DURABLE

Every home to-day needs a few pieces of good Willow Furniture—a chair in Living Room or Bedroom that is supremely comfortable yet neither expensive nor cumbersome; a tea table, work table or plant stand of little cost yet an artistic addition to any room.

For these reasons our HAND-MADE WILLOW FURNITURE appeals strongly to persons of taste and refinement. Acknowledged by Interior Decorators the best Willow Ware that can be made.
SKETCH SHEETS SHOWING A GREAT DIVERSITY OF STYLES
WITH PRICE-LIST, MAILED FREE ON REQUEST.

WALTER J. BRENNAN CO.

Odd pieces of furniture, artistic draperies
and gift articles not found in other shops.

436 Lexington Ave., Opp. Grand Central Station, New York

SHERWIN-WILLIAMS PAINTS & VARNISHES

For staining and varnishing floors and other surfaces at one operation use S-W FLOORLAC. It is a combination of stain that is non-fading and good floor varnish which is tough and durable and will not show scratches and heel marks readily. It preserves to the greatest extent the natural grain of the wood. Can be used with equal success on furniture and inside woodwork where a stain and varnish rather than a paint is desired.



Address all inquiries to **The Sherwin-Williams Co., 627 Canal Road, N.W., Cleveland, Ohio**



If you want your home —
to represent your taste and ideals you will enjoy
THE HOUSE BEAUTIFUL

It tells you by word and picture how others have made their homes both distinctive and livable. Profiting by their examples, you can go a step further and achieve effects in your home that would be impossible without the expert advice you receive from month to month in *The House Beautiful*.

It will tell you what color to tint your dining room, etc.; what disposition to make of a basement or attic chamber; how to know good furniture; how to care for your lawn and home surroundings, and many other things you want to know. Each issue contains 64 pages with 15 splendid features written by experts and beautifully illustrated.

TRIAL OFFER
With Complimentary Portfolio

The subscription price is \$3.00 per year. But to introduce *The House Beautiful* to new readers, we are making a special trial offer, outlined below. For \$1.00 we will send you *The House Beautiful* for FIVE months, beginning with the current issue, and also make you a present of "The House Beautiful Portfolio of Interior Decoration." The Portfolio is a collection of plates, many in colors, picturing and describing rooms which are unusually successful in their decoration and furnishing. The Portfolio alone is a prize money could not ordinarily purchase.

To avail yourself of this offer, cut out the attached coupon, pin a one dollar bill to it, fill in your name and address and mail it to-day to

HERBERT S. STONE, Publisher, *THE HOUSE BEAUTIFUL*, N.Y. City

The House Beautiful, Room 1716, 315 Fourth Ave., N.Y. City
I accept your trial offer and request that you send me
The House Beautiful for FIVE months, and also
your Portfolio of Interior Decoration. I enclose \$1.00 covering this special offer.
Name
Street
City State

book contains four articles: *The House and Its Environment*, by Arthur G. Bein; *The Art and Practice of Consistent Forms of Decorative Treatment* (the Georgian period), by Lionel Moses, jr.; *The English Derived Treatment of the Small American Dwelling*, by Frank C. Brown; and *The Architect and His Client*, by Oswald C. Hering.



Outlines of Practical Sanitation, price \$1.25; *The Sanitation of a Country House*, price \$1.00; *The Sanitation of Recreation Camps and Parks*, price \$1.00, by Dr. Harvey B. Bashore, M. D. Illustrated. Cloth, 8vo. New York, John Wiley & Sons.

We are more than likely to dwell upon the sensational side of progress and overlook the homely steps in national advance. As an example of this our interest in sanitation seems to be passive although science has for some time shown us the vital necessity of sanitary methods. Framed to meet this state of ignorance, these three books are full of compact and practical information which is of prime importance to everyone,—not merely the house owner—in that they give a clear and concise idea of what is requisite for normal healthy living and for prevention of disease.

Outlines of Practical Sanitation covers the field in general. It deals with the home and its requirements in plumbing, ventilation and heating, illumination, water supply and the collection and disposal of waste; telling what methods are best and where correction is necessary. The subject of food supply is also dwelt upon as is the cause and prevention of contagious and infectious disease. Besides this a rational view of personal hygiene is considered. The rest of the book has to do with the subject in relation to communities in general, and there is much here that the thoughtful taxpayer should know, to act intelligently.

"To make the country as healthy as the city...." is the aim of *The Sanitation of a Country House*. This statement has the appearance of a paradox until we begin to understand that while the cities have been spending millions toward improvement, the country has depended upon nature unassisted. The principles expounded in the previously mentioned book are here applied to the country house, from the time the location is selected until it has been in use some time. There are many suggestions that are helpful and best of all are simple.

Sanitation of Recreation Camps and Parks is of similar plan to these two books and applies the principles expounded to the practical building of the successful camp, protecting it from the hostile insects as well as from anything that might cause sickness.



Double Glass Sash

The two layers of Glass take the place of mats and boards

A 5/8-inch layer of dry, still air between the two layers affords ample protection even in zero weather.

Sunlight Double Glass Sash Co.
944 E. Broadway
Louisville, Ky.

The Recreation of Winter Gardening

If you use Sunlight Double Glass Sash you eliminate the work and have the unalloyed enjoyment of the lettuce and violets you get from your hot-beds and cold-frames. And in the Spring you have early plants of all kinds to set out in the open.

WRITE FOR THESE BOOKS

One is our free catalog; the other is by Professor Massey. It tells how to make and care for hot-beds, what and when to plant. Four cents in stamps will bring Professor Massey's book in addition to the catalog.



"CRAFTSMAN"

HOUSE PLANS FREE



Designed by GUSTAV STICKLEY

Send 6 cents for a copy of "24 CRAFTSMAN HOUSES" showing exterior and floor plans of 24 houses that cost from \$900 up to build. To interest you in our magazine, "THE CRAFTSMAN," our FREE HOUSE PLANS and in Craft articles, we will also send you a beautifully printed 32-page booklet entitled "The Craftsman House." If you are interested at all, both of these books will be very useful to you.

"THE CRAFTSMAN IDEA" means real homes, not mere houses; it shows you how to save money on useless partitions—how to avoid over-decoration, how to get wide sweeps of space (even in a small house), restful tones that match and blend—and enables anyone to always have a beautiful and artistic home.

"THE CRAFTSMAN MAGAZINE" treats of building, furnishing and beautifying homes—of art—embroidery—cabinet work—and kindred topics. In the Magazine each month are published the plans of two new and entirely different houses. Already we have shown 125 houses, and you can have your own choice.

"CRAFTSMAN HOMES," by Gustav Stickley, 205 pages, beautifully bound and printed, treats of home building, home making, home furnishings in full.

EDGAR E. PHILLIPS, Manager "THE CRAFTSMAN"

Room 280, 41 W. 34th St.

New York City

For durable painting of all kinds use National Lead Company's Pure White Lead "Dutch Boy Painter" (trade-mark). Ask for Helpe No. 91. Sent FREE on request.

NATIONAL LEAD COMPANY, 111 Broadway, New York

INTERIOR DECORATORS

Color Schemes Planned and Executed
Stencil Work and Applique Work :
Samples and Estimates on Request

BOWDOIN & MANLEY

546 Fifth Avenue

New York

Some Truths About Advertising

Here is a symposium on the advantages of advertising in "The Philistine" and THE FRA; the same being penned with a due regard for truthfulness.

"The Philistine" and THE FRA are edited by Elbert Hubbard.

Their circulation is national and bona fide. They are read and passed along.

They go to a class of people who think and act for themselves, and who have the money and brains to discriminate in favor of good things.

The Editor of "The Philistine" and THE FRA is perhaps the most widely quoted and the most positive force in the literary and business world of today.

Elbert Hubbard's admirers and patrons form a distinct class who can be reached only through the medium of his publications.

While you may not agree with all you find in "The Philistine" and THE FRA, there are thousands who do, and who believe in the advertisements as well as in the writings of Fra Elbertus.

The readers of "The Philistine" and THE FRA are made up of all classes, from the millionaire who buys the choicest and costliest products of The Roycroft Shop to those who treasure their one and two-dollar productions as their choicest and dearest bits of literature—hence anything good can be profitably advertised in these publications.

No advertisement of a questionable nature will be accepted at any price.

If you have anything to sell to reading, thinking people, a better or more permanent method of placing yourself before them than advertising in "The Philistine" and THE FRA can not be found.

Think it over—and let us have your contract before rates are advanced.

James Wallen, Advertising Manager,
The Roycrofters

East Aurora, N. Y.

THOSE APPLES

—Continued

WE knew that we had the apples of "Topsham Quality," but we had a qualm or two about our ability to pack them in Western style. Now we wear a perpetual smile, for we know that we can do it. Harvard University educated the foreman of the packing house, and did a good job, too. The New Hampshire College of Agriculture trained our packer of boxed fruit, and I only wish that you could see him at his work. Every apple that gets into the "Fancy" box is inspected three times, which means that every apple comes up to our standard of freedom from blemish and has good color. It is then wrapped and packed. You have seen the Oregon fruit. Ours looks like it, and tastes as only New England fruit can taste. We are so well pleased with it and with the orders that have come in, that we have made two changes. On October 15th, the price was raised and a new grade of boxed fruit introduced.

Our Fancy grade we now sell for \$3.00 per box, F. O. B. Bradford or South Ryegate.

Our Number One grade, in boxes, will cost you \$2.00, F. O. B. We will continue to ship Number Ones in barrels to those who wish them, and will put them on the railroad for \$4.50.

Express to New York on one box is about sixty cents, freight somewhat less.

FAMEUSE.—Early comers can yet secure a few Famense, but our supply of McIntosh Red is exhausted.

BETHEL.—This is the winter apple that we want you to try. We believe that you will like it, and we KNOW that you will like the way it is put up. The bright sunshine and the early frosts have given it a color and a crispness of taste that will make you forget the cares of the day. Try a box of the Fancy or the Number One and we will be sure of a customer next year.

We ask for a check with your order, and feel sure that you will be glad that you didn't forget to send for a box of our apples.



TOPSHAM QUALITY
FANCY VERMONT APPLES

JULIAN A. DIMOCK, East Corinth, Vermont

HOTEL CHAMBERLIN

At Old Point Comfort Virginia

The Ideal Resort The Year 'Round

Here you can find complete mental and physical rejuvenation. This delightful, invigorating climate and crisp, bracing, ozone-laden air will give you a new lease on life.

Come now, when the brilliant Autumn season is at its height, and enjoy some rare fishing, motoring and golfing, and attend the dances in the evening, which are given an added charm by the presence of the officers of the Army and Navy.

Easy to Reach—Central Location.—Hotel Chamberlin is located right on Hampton Roads and at Fortress Monroe. Quickly accessible from anywhere by rail or steamship. A great, gay, palatial hotel, yet homelike and exclusive. Delicious, real old Southern cooking. Indoor saltwater bathing in Magnificent Sea Pool and finest Medicinal Baths of every description.

For further information and interesting illustrated booklet, apply to any Tourist Bureau, or address me personally.

GEORGE F. ADAMS, Mgr.

FORTRESS MONROE, VA.
New York Office, 1122 Broadway





IMPORTANT HOUSE AND GARDEN BOOKS

The Garden Primer

By GRACE TABOR

THE GARDEN PRIMER, as its title indicates, is a hand-book of practical gardening information for the beginner, covering every branch of the subject from preparing the soil to the gathering of the fruit and flowers. In it is set forth, without any confusing technicalities, just the information that will enable the amateur to grasp quickly the essentials of garden-making. The author, in preparing this book, has drawn from her long experience, and in writing it assumes on the part of the reader no knowledge of the subject, in order that it may be of the greatest value to the beginner. While dealing with first principles this volume has an equal interest for the advanced gardener, who will find much of value in the experiences of the author, and in a fresh presentation of a subject which always abounds in new methods and discoveries.

Every branch of gardening is treated in a delightfully practical way—the growing of vegetables and flowers, the use of fertilizers, pruning, cultivating, spraying and the thousand-and-one things that every successful garden-maker needs to know. A profusion of illustrations, many of them of the most practical sort in explaining the various garden operations, makes the text especially clear.

2nd Edition Revised and Enlarged: Cloth, 12mo. \$1.00 net; postage 9 cents

Home Vegetable Gardening

By F. F. ROCKWELL

THERE are many books that treat of vegetable gardening, fruit growing and the like, in an encyclopedic way. They tell what vegetables there are, their characteristics, ideal conditions for each, what pests are liable to attack them, and so on, giving far too much information and in too technical a form for the man or woman who wants to establish a vegetable garden on the country place or suburban plot for family use. Here is just where "Home Vegetable Gardening" is different from books of this kind. The author, F. F. Rockwell, is a practical gardener himself. He realizes from long experience just what the average layman wants to know in order to raise a successful crop of vegetables and fruit. Accordingly, he has gathered together in this little volume exactly the information that will make it of satisfying value to the amateur. Nothing is omitted to make a book that will answer every question and prove a reference of un-failing value. Complete planting tables show at a glance when to plant, how deep, how far apart, the time of maturing, etc. Profusely illustrated.

Cloth, 12mo. uniform with the "Garden Primer" \$1.00 net; postage 9 cents

The Landscape Gardening Book

By GRACE TABOR

THERE have been many books published within the past few years on the various branches of gardening, but most of these have dealt with the cultural side exclusively. The larger subject, embracing the whole site of the country home, particularly one of moderate size, has apparently been ignored. The author of "The Landscape Gardening Book," a well-known landscape architect, has written the one book that solves the whole problem of making a home out of a house and plot. The book shows just how to plan the home grounds, whether they consist of a suburban plot or a large estate—how to plan the entrance walks and driveways; how to plant trees so that they will give the most value in shade and beauty; how to group and plant shrubbery for a harmonious mass as well as a succession of bloom; how to make the grounds attractive in winter—in short, this is the one essential book for the man who would have his home something more than a mere building set on the earth. The illustrations are superb half-tone reproductions of representative gardens and homes.

Cloth, 8 vo., \$2.00 net; postage 20 cents

Distinctive Homes of Moderate Cost

Edited by HENRY H. SAYLOR

THIS book has been published in response to an ever-increasing demand for a volume of pictures, plans and descriptions of the most charming homes in the country—not the great estates and show places, but the sort of places that most of us can look forward to building, ranging in cost from \$3,000 to \$20,000.

The illustrations, of which there are more than three hundred, both of the exteriors of houses and their garden settings, and of the principal rooms inside, are all from photographs of houses already built, reproduced in superb half-tone engravings, with line drawings of the floor plans.

The carefully selected contents include country homes, seashore cottages, alluring hungalows, inexpensively remodeled farmhouses, etc. All the desirable architectural styles are represented: Colonial, English Half-timber, Stucco, Cement, Dutch Colonial (the gambrel roof type), Swiss Chalet, etc. Chapters written by authorities cover all sides of the fascinating problem of house-building, interior decoration and furnishing. The relations between the home-builder and his architect, the matter of plans, specifications, contracts, the puzzling problem of extras and how to avoid them—all these subjects are clarified in a most comprehensive and interesting way. Throughout the text are many pages of pictures illustrating constructive, decorative and furnishing details—entrance doorways, bay windows, outside shutters, chimneys, stairways, dormer windows, built-in china-cupboards, consistently furnished interiors, porches—all grouped so that the reader may, at a glance, compare all the best types.

"Distinctive Homes of Moderate Cost" is a sumptuous book of 10 x 13½ inches bound in gray crash with tasteful decoration. Printed on Plate Paper with over 300 illustrations.

Net \$2.00; postage 25 cents

Bungalows

By HENRY H. SAYLOR

HERE at last is a book that covers in the most practical and comprehensive way the whole subject of bungalow building and furnishing, with a profusion of pictures of successful bungalows and their interior arrangements. The author, an architect himself, points out the advantages of the bungalow type of house and shows how it has been applied to fit American needs. The matters of planning and building materials are thoroughly covered; the subject of interior finish is also taken up, together with schemes for furnishing that are in harmony with the informal and comfortable character of the building. The fireplace, too, always an important feature, is thoroughly discussed, as well as such essential features in the completion of a successful bungalow as water supply and drainage.

The pictures and plans in which the book abounds are of the various types of bungalows—those adapted for all-the-year-around occupancy, for summer homes, mountain camps, and the seashore. The many superb pictures forming the illustrative features are of bungalows that have actually been built, and are the work of leading architects in various parts of the country. They have been carefully selected so as to prove of the greatest value to the prospective builder of this fascinating type of moderate priced house.

Cloth, 8 vo., \$1.50 net; postage 20 cents

Inexpensive Homes of Individuality

THE prospective builder can find no more adequate or valuable assistant in determining the style, construction and decoration of his home than this book, "Inexpensive Homes of Individuality." It contains plans and photographs of houses, moderate in size and of greatest architectural merit and is full of just such suggestions as the man about to build will appreciate. It offers an opportunity to study in detail some of the best homes in the country, of many different styles and varying in cost from \$2,000 to \$8,000.

Mr. Frank Miles Day, past president of the American Institute of Architects, has written the introduction on the "Choice of a Style for the Country or Suburban Home." Within the sixty-four pages there are over one hundred and twenty-five illustrations and plans made doubly illuminating by information pertinent to cost, location and detail of construction. Printed on coated paper, with an attractive art cover design in two colors.

Price 25 cents postpaid



House & Garden

McBride, Nast & Co., Publishers, 31 East 17th Street, New York



Travel

A TRAVEL BOOK THAT TAKES YOU THERE

DR. LEWIS GASTON LEARY'S

THE REAL PALESTINE OF TO-DAY JUST READY

First Volume of the

"Blue Books of Travel"

Devoted to the Human Side of Travel

A series filled with vivid descriptions that hold you fast, and striking illustrations that make each place live for you. Each book is of true educational worth, yet as wholly absorbing as a novel. Not the stereotyped guide book or mere colorless record of events.

OUR EDUCATION is never complete. The more we travel the broader our education becomes, but many of us cannot travel, time does not allow.

THE REAL PALESTINE OF TO-DAY, as seen through the eyes of Dr. Leary, is an unfailing source of real education, and absorbing interest. From what land can more of educational value be had, than Palestine, with its present day characteristics, the outgrowth of the successive influence of Persia, Macedonia, and Rome, before the Christian era, and the innumerable latter-day conflicts between Christian and Moslem, the possession of the Holy Sepulchre?

THOSE WHO HAVE READ Dr. Leary's articles on Palestine need no assurance as to the real gripping interest with which he clothes the people, the customs, and the landmarks of this tiny land that is "Holy" alike to Jew, and Christian and Moslem. His residence for a time in Beirut gave ample opportunity for an unusually thorough study of the people themselves—their mode of life, their customs and prejudices, and this side of the subject is one that must always have the widest educational value. The author's intimate knowledge of the country's legends—those that are well substantiated and those that are merely amusing—makes the book as entertaining as the best fiction.

The book is of convenient size—5¼ by 7¼ in. Bound in dark blue linen boards with illustrations, besides maps of the whole country and of important sections of it at larger scale.



Copyright by Underwood & Underwood, N. Y.

By the Sea of Galilee Where the Fishermen Draw Their Nets To-day as They Did in Biblical Times

The following list of chapter headings proves *The Real Palestine of To-day* a book of uncommon worth:

Tiny Palestine	The Heart of Christendom	The Backbone of Palestine
The Great South Road	The Holy Fire	The War-path of the Empires
The Races and Religions	Valleys and Tombs	Greetings by the Way
The Oldest Church in the World	The Mount of Olives	The Ring of the Gentiles
The Mystery of Machpelah	The River that Goes Down	The Glory of All Lands
The Dome of the Rock	The Sea of Death	The Lake of God's Delight
The Wall of Tears		Chronological Table

a charming cover design in white, red and gold by George Hood. There are 64 pages of Price, \$1, net, postage 10c.

McBRIDE, NAST & CO.

31 East 17th Street, New York

AMERICAN HOMES AND GARDENS —THE— DECEMBER NUMBER

THE reader of AMERICAN HOMES AND GARDENS will find many important articles in the next issue of the magazine. This December number will contain a beautifully illustrated article on one of America's loveliest gardens, a garden which, though planned and planted by one of our foremost landscape architects, is nevertheless full of suggestion and ideas that might be applied to the laying-out and making of even a very small garden by the amateur himself. The article will be accompanied by ground diagrams and gives an indication of what AMERICAN HOMES AND GARDENS will present this coming year for the consideration of its readers. To this number one of the foremost authorities on the subject of textiles will contribute a most entertaining and helpful article on Oriental Rugs. Many persons imagine that genuine oriental rugs must necessarily be beyond their purses, in consequence of which they have passed by the subject. They will, perhaps, be surprised to find that rugs of good pattern, texture and durability can be had to fit almost any purse, the prices of the various rugs being given in this article. One of the most attractive houses in the vicinity of Philadelphia will be described by a well-known architectural authority, and fully illustrated with reproductions of both exteriors and interiors. It is a house so skilfully planned that despite its ample proportions it still creates an atmosphere of home-feeling and inspires one with commendation for this sort of domestic architecture, which never can be too generally employed. Edward I. Farrington, the poultry expert and a writer of accepted authority, will contribute an illustrated article on the subject of "Keeping Twenty-five Hens." This and future articles on kindred subjects will assure the standard that has been set by AMERICAN HOMES AND GARDENS for its Poultry Department. The same number will include another article on "Making Hens Lay in Winter," and a helpful Kennel article. If the reader of this present issue has found pleasure in the various photographic reproductions of "friendly dooryards," which the Editor hopes will serve as a little primer for stimulating home-building efforts in such directions, it is to be hoped that he will also find as much of interest in a similar feature that will occupy the middle pages of the magazine for December, a feature especially appropriate to the holiday season, as will be several other articles, including an essay by a New England writer of note on nature subjects. There will be other articles dealing with homes and gardens of distinction and the issue will be fully as interesting as the present one. "Good Taste in Decoration" will head the department established in the present issue called "Within the House," and the Garden Department will cover a variety of hints and suggestions useful to the home-builder and the garden maker, while some new, original and delicious Christmas dishes will be described in the "Helps to the Housewife" Department. The December number will be richly illustrated throughout.

SUBSCRIPTION, \$3.00 A YEAR

MUNN & CO., Inc., Publishers

SINGLE COPIES, 25 CENTS

361 Broadway, New York



Country for Sale

*The Real Estate Department of House & Garden will be glad to advise its readers in regard
This service is given without charge. Address Real Estate*



High Class Country Homes in New York City

Riverdale-on-Hudson

Broadway to Riverdale Avenue
242d Street to 252d Street

High class residential plots, on the highest land in New York City. Carefully restricted, surrounded by private country estates. Exceptional transit facilities combining

Country Charm with City Comfort

On Spuyten Duyvil Parkway and Riverdale Avenue, overlooking Van Cortlandt Park. Several attractive residences already built. Streets graded and curbed. Sewerage installed, and all city improvements. Complete seclusion. The property is exceptionally high class. Prices are not prohibitive. Everything combines to make an unusual opportunity for a

Good Investment and a Charming Home

Reached in 35 minutes from 42d street by Broadway subway direct—New York Central or Ninth Avenue elevated.

Booklet and particulars on application.

The Delafield Estate, Inc.

25 Broad Street, New York City.
Tel. 3178 Broad.



For Sale, Greenwich, Conn.

This estate, the finest in Greenwich—43 acres. Modern house of 21 rooms, complete in every detail. Gardeners house, garage, stable, etc. This estate can be bought complete or sub-divided, the payments on easy terms.

LAURENCE TIMMONS

OPPOSITE R. R. STATION

Telephone, 456 GREENWICH, CONN.



"WAMPAGE SHORES"

Manhasset Bay, Sanda Point, L. I.
R. R. Station, Port Washington.

Highest class perfectly developed waterfront plots of 1/4 acre and larger, with private beaches. Magnificent views. Perfect anchorage.

This section is famous for its natural beauty, health and social attractions, and property of this type was heretofore only within reach of the very wealthiest.

Write for particulars.

S. OSGOOD PELL & CO.,

Tel. 5610 Bryant. 542 Fifth Avenue.



IN CHARMING KINDERHOOK

A gentleman's village home for forty years is now placed with us for sale. Twelve room house with 5 fireplaces, highest class in every respect. This place is on a quiet, very beautiful street with an outlook hardly surpassed in any village of America. Kinderhook is a fine old village with a progressive community and many advantages. Send for booklet about Kinderhook.

Rural Life Co., Kinderhook, N. Y.

IN HYDE PARK, EAST ORANGE



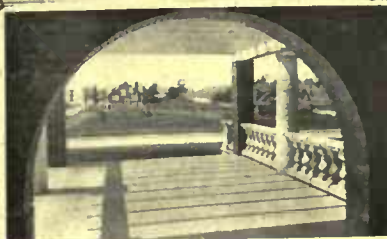
AN exceptional opportunity to purchase a well-built home on a beautiful, tree-shaded, quiet street in the best residence section. The house, on a plot 40 x 105 ft., has nine rooms, bath, pantry and store room. Heated by hot air. Unexcelled water. Fine schools and neighbors. Has been occupied only by owners and is in first-class condition, with good wall papers and garden border. Peach and cherry trees. Fifty trains daily to New York, ferry or tube. Price, \$7,500; easy terms. For further information address H. H. S., House and Garden, 31 East 17th St., New York.

Property and Rent

to the purchase, sale or rental of country and suburban real estate in all parts of the country.
Department, House & Garden, 31 East 17th Street, New York City.

Philipse Manor

A Mile on the Hudson



TODAY

PHILIPSE MANOR is a Residence Development, with room for over four hundred country homes—all overlooking the BROAD EXPANSE of the HUDSON RIVER at its most beautiful point.

A PLACE

Where, in fact, from the start the object has been to create a Residence Section of the VERY HIGHEST CLASS, confined, as far as the real efforts of the Company could do so, to such people as would make congenial neighbors. Every improvement installed NOW—not promised—and houses built by day's labor can also be had. 5% Mortgage terms.

WITHIN ELECTRIC ZONE

3 miles from Grand Central Station, a mile from Tarrytown, but also its own Station on the property. REMEMBER—a MILE FRONT ON THE RIVER. Photos supplied.

Offices at
Philipse Manor
White Plains

Cooley & West Inc.
Telephone Murray 114 440
331 Madison Ave. N.Y.

Offices at
Mount Vernon
New Rochelle

Villa Sites

Overlooking the Town of Beverly
and Massachusetts Bay

But 25 minutes from Boston and only 5 from Beverly Station. 60 acres for sale in lots as the purchaser desires. A gradual slope to the splendid water front offers exceptional facilities for boating and salt-water bathing. Address

H. A. WYCKOFF

274 Clinton Avenue, BROOKLYN, N. Y.

FOR SALE: Beautiful Berkshire Farms and Estates. Lake fronts. Timber tracts; Hotels; Stores. Send for Booklet, it's free.

D. B. CORNELL CO.

Gt. Barrington, Mass.



"Edgemont Estate" At Scarsdale Station

The ideal realization of out-of-town living. A delightful home community, for all-year residence. Protected social environment, the charm of the country, all city improvements. Immediately at station, only 19 miles on Harlem Elec. Div. N.Y. Cent. R.R. Special advantages to be secured for those building during the present season.

Write for Booklet A

Scarsdale Company

J. Warren Thayer, Pres.
Scarsdale 503 Fifth Ave.
New York New York City

Princeton

"The ideal home town" all the year round. Splendid residences, beautiful landscapes, healthful surroundings, convenient location. Express train service to New York and Philadelphia.

Rentals, \$300 to \$6,000 a year. Tastefully furnished homes also for rent.

Town and country properties—furnished or unfurnished—for sale or rent.

WALTER B. HOWE, Princeton, N. J.

New York Office, 56 Cedar Street

We Finance Country Homes

We will build according to your own ideas, on specially selected property, in Westchester County, vicinity of Bronxville and Tuckahoe, and on North Shore of Long Island. Write for particulars.

The Debenture Corporation of New York

No. 334 Fifth Avenue

New York City

FOR SALE The best farm in Niagara Co. 325 acres, of which one-half is planted to fruit, standard varieties. Four houses, three barns, etc. Main house equipped with all city conveniences. Large flower garden. Big income producer.

F. R. Wheeler, Lockport, New York

"Twin Oaks Farm"

THIS beautiful Virginia Estate of about 180 acres, located within three miles of Warrenton, Fauquier County, Virginia, on a macadamized road, is offered for sale at a most attractive figure.

The residence, built of stone and frame, consists of 13 rooms and two baths. Lighted by acetylene gas, heated by furnace, is one of the handsomest residences in Virginia and most complete in all detail. It is situated on a hill commanding a superb view of the surrounding valley and mountains.

Complete coach house, poultry house, sanitary cow barn, hog houses, meat house, servants' quarters with bath, laundry, milk room, etc. Large farm barns and tenant houses.

The land is most fertile and well fenced, amply watered. This farm is just about as near a perfect country estate as can be found. No remodeling, no repairs necessary. Ready to move into and enjoy the delightful Virginia country life.

For full particulars, illustrated booklet,
etc, write to

HARRY M. HUBBELL
Warrenton, Fauquier Co., Virginia

HOMES AT SHORT HILLS

New Jersey's Most Exclusive Residence Section

Near Baltusrol Golf Club
and
Canoe Brook Country Club

Invigorating mountain air; broad outlook; pure, unfailing water supply; all city improvements; excellent express train service to New York. We build for your distinctive houses. Send for particulars.

ROCHE, CRAIG & WILEY,
Suite 1303—Phone, 1546 Cortlandt
165 BROADWAY, NEW YORK



A beauty! This large 7-8 room bungalow
WITH 2 ACRES

High, fine view, 12 minutes' walk to trolley, good neighbors

FOR \$5000 — REASONABLE TERMS

J. B. Lawrence

15 South Main Street

South Norwalk, Conn.

STILLWELL BUNGALOW BOOKS - PHOTOS - PLANS



"REPRESENTATIVE CALIFORNIA HOMES"—Price 50 Cents.
50 one and two story houses of five to ten rooms; costing \$1500 to \$6000.

"WEST COAST BUNGALOWS"—Price 50 Cents.
50 one story bungalows of four to six rooms costing \$500 to \$2000.

E. W. STILLWELL & CO., Architects, 2176 Henne Block, Los Angeles





KENNEL DEPARTMENT

The purpose of this department is to give advice to those interested in dogs. The manager will gladly answer any troublesome questions. Address "Kennel Department" and enclose a self-addressed envelope.



Do
You
Feed
Your Dog
Like a Pig



on odd scraps and waste? Or
do you treat him as he deserves?

Austin's Dog Bread

is real dog food. Made of just the things that are good for your dog at all seasons—clean sweet meat, cereals and flour. No waste materials are used. Will give your dog a glossy coat, a clear eye, and sound muscles.

Send for Free Sample

A postal will do. State whether you want Austin's Dog Bread or Austin's Puppy Bread (for puppies and small pets)—and give us the name of your dealer.

Look for **AUSTIN**
on Every Cake

**AUSTIN DOG BREAD &
ANIMAL FOOD CO.**
211 Marginal Street, Chelsea, Mass.



IRISH TERRIER PUPPIES

of both sexes. All from the very best stock.

For particulars address

CLOVERLY KENNELS

West Chester,

Penna.



Delight the
Child's
Heart

A Shetland Pony

—is an unceasing source of pleasure. A safe and ideal playmate. Makes the child strong and of robust health. Inexpensive to buy and keep. Highest types here. Complete outfits. Entire satisfaction. Write for illustrated catalog.
BELLE MEADE FARM
Dept. 3, Markham, Va.

Pointers and Setters

WANTED TO TRAIN ON GAME. PLENTY GAME. TRAINED DOGS FOR SALE

W. GEORGE SMITH

K. 9 Kennels,

Marydel, Md.

For Sale PEDIGREED SCOTCH COLLIES,

GROWN DOGS AND PUPPIES; Intelligent and Gentle; Accustomed to Children

GET YOUR CHRISTMAS GIFTS NOW

Write for information about these magnificent dogs
WALNUT FARMS, NORRISTOWN, PA.



THIS celebrated English Dog Food, now being used exclusively in the leading kennels of the country, is a clean food made to nourish and nothing else. It is composed of fine beef and the highest grade of materials throughout and absolutely free from chemicals and appetizing spices. Your dog will eat it readily, either dry or moistened with hot water, soup or gravy.

Send for Sample and Booklet No. 10
describing its use

H. A. ROBINSON & CO. IMPORTERS

128 Water Street

New York

FOR SALE

A well bred Great Dane Dog. Excellent watchdog, thoroughly reliable. Address

Geo. F. Tucker, 299 Central Avenue
Albany, N. Y.

Russian Wolfhounds

The Best Dog in the world and one of the Rarest Breeds extant. Peerless in beauty and reliability of disposition. Companions for gentlemen, ladies or children.
CATALOGUE "H"

Mirasol Kennels

Pasadena,

California



HANDSOME CATS AND KITTENS FOR SALE—



Domestic and rare foreign varieties. Siamese, Abyssinian, Manx, and Russian. Ideal boarding place for cats, dogs and birds. Model Poultry department, supplies broilers, fowl and squab.

Write for beautifully illustrated catalogue and sales lists.

BLACK SHORT HAired CATTERY Oradell, N. J.



TOY WHITE FRENCH POODLE PUPS, sire d by FUZZ, Stewart Famous Prize Winner. Also Pomeranian Pups. Pedigreed Stock.

Send Stamp for reply.

MRS. G. C. ROHDE,

Ann Arbor Mich.



RABBITS AND PET STOCK

Unrivalled Flemish Giant, Angora, Tao and Polish Rabbits — Peruvian and Smooth Cavies for fancy or pets.
Some Good Youngsters now for sale, \$1.00 up
Elm Cove Habbitry, Great Neck, L. I.

Good Manners in the Dog

IN our complex life today the keeping of a dog is often a matter of considerable sacrifice of time and convenience and often entails some hardships. The difficulty of transporting our pets when we must move, the trouble of cleaning, washing and feeding, the nuisance of hairs on our lounges, window seats and best clothes—these are all little disadvantages of having dogs, but to those of us who love them are not worth consideration when weighed against the great pleasure of a faithful, constant companion.

If we wish to gratify our longing to have our friend, the dog, with us, and thus to develop a side of our nature that ought not be neglected, we should willingly put up with some of the petty annoyances. What is more, a careful training can do away with many of the distasteful elements. A good dog really reflects a good master, for the slipshod man who neglects his pets or the over-indulgent one who spoils them, is a man who would act in a parallel manner with his children. No one should have a dog unless he is ready and anxious to exert his influence, spend his time and lend his careful attention to bringing up his canine companion in the way he should go about it.

With these things granted there are some things to be suggested to make the dog what he should be. First, you must insist on cleanliness and stringently, if necessary. You can form a habit for your dog that will not be broken if established early. A young puppy should not be allowed in the house, except occasionally, and never after he has been sleeping, unless he has been allowed outside for awhile. When he does wrong he should at once be scolded and clearly shown that he has misbehaved. When you scold a dog don't turn around and pat him and say, "good fellow," or he will never be obedient. A firm hand is necessary and one that assists in shaping his course of life. The dog should early be taught his province, made to recognize his bed and given to understand that there are certain sections of the house which he must not enter. Regularity of training makes regularity of habits and will make your dog a pleasure to have around, not a nuisance. Those animals that keep up a constant yap-yapping whenever the door bell rings, that climb all over visitors, have their beds on livingroom pillows and enter the dining room, whining during meals, simply cause trouble to their owners because they have not been taught what is right. You don't need to be cruel but you can be firm and it should be a subject of pride to you to know that your dog is well brought up.



The Prolific Ancona

SOMETIMES a breed of poultry about which little is known, suddenly springs into wide popularity. This has

been the experience of the Ancona in America. The breed was admitted to the standard in 1895 and a number of fanciers had been showing a few birds for several years before that time, but little was heard about Anconas until recently. Then they began to be talked about, for the fact developed that breeders all over the country had quietly added a number of Anconas to their flocks with the most satisfactory results. Now the hens of this breed are being heralded as wonderful egg machines, quite equal, if not superior, to the Leghorns. As a result of the fact that they have not been unduly forced or experimented with, they are unusually hardy and vigorous, laying well for two or three years, so that they commend themselves to the amateur who does not like to renew his flock every season.

Anconas belong to the Mediterranean class and possess most of the common characteristics of that class. They lay white eggs of fair size and may be called non-sitters. They differ materially from the Leghorns in one respect—they are not wild, either when on range or in the yards.

In color, Anconas are black and white, evenly mottled. Even as small chicks they show these markings and are very pretty in the pens. The male birds seem to run a little darker than the hens, and are very stylish, with fine tail feathers. Anconas breed fairly true to type on the whole, although an occasional bird which is almost wholly black will be seen.

Although comparatively small, these fowls dress well and the meat is rather finer in grain as well as better in flavor than that of the larger breeds. Of course, they are not classed as table poultry, but they may be safely recommended as excellent egg producers and in sections where white eggs are called for, will, undoubtedly, be bred in increasing numbers. Anconas are also very satisfactory for the amateur, anywhere, for they endure confinement well. They are strong flyers, however, and this fact should be kept in mind when constructing the yards.

E. I. F.



The Winter Green Ration

ALL experienced poultry keepers know that green rations in some form are indispensable when feeding for winter eggs. Probably alfalfa or clover hay is the best green ration. The bureau of animal industry presents the following formula for the preparation of clover hay in order to get the best results: Cut the hay into lengths of one-fourth to one-half inch and place it in a bucket. Pour boiling water over it and allow it to stand two or three hours, or over night. Then drain off the water and mix the hay with a mash, of which it may constitute one-half the bulk.

I knew a successful poultryman who placed scalded hay by itself before the birds, who ate it greedily. Alfalfa meal



Don't You Want a Fireplace in Your Home?

Don't you want the cheer, the comfort that only an open fireplace can give? Haven't you at least one room in your house which can be absolutely transformed by the addition of a fireplace? Or, if you are thinking of building, don't you owe it to yourself to find out all you can about fireplaces before deciding?

Our Beautiful Free Book—"Home and the Fireplace" is a regular mine of information about fireplaces. It tells all about Colonial Fireplaces, the only kind in the world sold under a positive guarantee. It tells all about the Colonial Plan that makes buying a fireplace as simple as ordering a picture. Besides, it contains a number of beautiful illustrations of the splendid Colonial Designs—just a few representative selections from the complete Colonial line with descriptions and prices. If you have any idea of building, or if you would like to know how and where you can add a fireplace to your present home, you need this book. **WRITE TODAY**—Just send your name and address, but we would suggest that you write at once. Just drop us a line right now.

Copy of our book of fireplace detail, explaining thoroughly the Colonial head, throat and damper, is being mailed to every professional architect in the country.

COLONIAL FIREPLACE CO. 459 W. 12th St., CHICAGO

A PURPLE MARTIN HOUSE AT COST



This house is built especially for the colonization of that social, useful little bird-neighbor, the purple martin.

It is not a makeshift miniature, but is of three eight-room stories and attic.

The house is 28 inches high, substantially constructed throughout and always gets the martins. It may be purchased at cost by bird lovers anywhere for \$11.00 f. o. b. Chicago. Correspondence solicited.

I also have manufactured for me a beautiful, unique hanging wren house, which is guaranteed to attract the wrens, and which I sell for \$15.00.

JOS. H. DODSON

901 Association Building CHICAGO
Director Illinois Audubon Society



Talk with me. Costs nothing. May interest and help you. Put your ideas with mine; then alterations, decorations, etc., become beautiful and satisfactory. Personal supervision, town or country anywhere. Artistic results certain.

Write or 'phone me.

H. P. FREAR

18 W. 34th St., Astor Ct., N. Y., Tel. 4548 Murray Hill

FLOOR VARNISH "61"

Mar-proof, Heel-proof, Water-proof

SAVE YOUR TREES

They are too precious to lose. Get expert surgeons to examine them and advise you as to what they need. Avoid tree fakers and tree butchers. Our free booklets explain tree surgery, the science founded by John Davey. Write for them.

The Davey Tree Expert Co., Inc., 4510 Acorn St., Kent, Ohio

For durable painting of all kinds use National Lead Company's Pure White Lead "Dutch Boy Painter" (trade-mark). Ask for Helpe No. 91. Sent FREE on request.



NATIONAL LEAD COMPANY, 111 Broadway, New York

Planet Jr Farm and Garden Tools

get largest crops with least work.
Write to-day for 1912 illustrated catalogue.
S. L. Allen & Co., Box 1110 K., Philadelphia, Pa.

Supply Your Pets With Pure Water



Half the irritability in domestic pets can be traced directly to a lack of pure drinking water when they are thirsty. Your pets will appreciate pure water to drink just as keenly as you do—why not see that they have a plentiful supply, free from contamination in a

Moe's Top Fill Drinking Fountain

For Domestic Animals

It always supplies just enough pure water in the trough—will never stop over—dog can't up-set it. Dead air space keeps water *Cool in Summer, Warm in Winter*. Simple in construction—just remove cover and fill from top—water ceases to flow when top is removed—no valves to get out of order. Nickel plated, holds quart and a pint. If not at dealers, will be sent on receipt of price, \$3.50. Silver plated, \$5.00. Satisfaction guaranteed.

OTIS & MOE, 550 S. Dearborn St., Chicago

Baby Chicks of Quality

Sent by Express Direct to You

Why bother with eggs? I can supply you with healthy young chicks at once and guarantee them to reach you in good condition. Fishel Strain White Plymouth Rocks, S. C. R. I. Reds and other breeds. Prices reasonable. Chick catalogue free.

R. C. CALDWELL

Box 1030

LYNDON, ROSS CO., OHIO



Between

**CHICAGO
ST. LOUIS
KANSAS CITY**
via the

Chicago & Alton

Automatic Block Signals
Rockballasted Roadbed
Electric Lighted Trains
Unexcelled Dining Service
The Only Double Track Railroad

between Chicago and St. Louis
For Time Tables and Fares Address:
**R. J. McKAY, General Passenger Agent
CHICAGO**



POULTRY DEPARTMENT

The purpose of this department is to give advice to those interested in poultry. The manager will gladly answer any troublesome questions. Address "Poultry Department" and enclose a self-addressed envelope.



THE HALL MAMMOTH BROODER

Efficiency of work and economy of operation are the two factors upon which successful money-making brooding depends. These two factors are most highly attained in The Hall Mammoth Brooders.

They achieve their efficiency by following the laws of nature. She gave the chick the cool earth upon which it was brooded. She gave it heat radiated from the body of the old hen to its back. She gave it pure, cool air in which to run, returning to the hen when cold. These same natural conditions are supplied by The Hall Mammoth Brooders. Cool floors develop stout, stocky legs. Hall Mammoth Brooders radiate their heat onto the backs of the chicks.

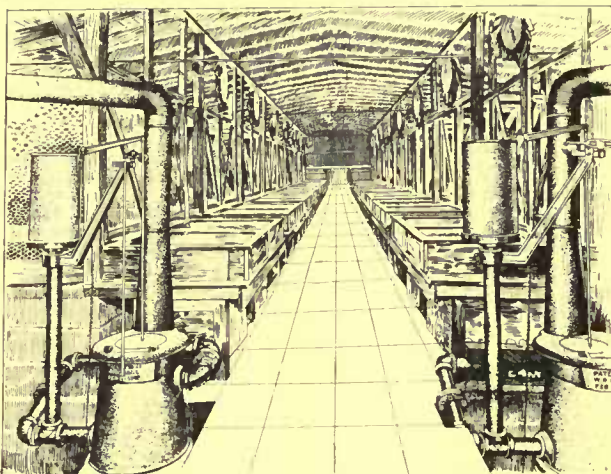
They continually supply pure, fresh air—plenty of oxygen.

The Hall Mammoth Brooders combine economy with their perfect efficiency. They cost less per chick to operate than any on the market.

Write for free catalog, "Fact and Argument." It will tell you many things about brooding that will be of profit to you. It will convince you of the superiority of The Hall Mammoth Brooder. Write today.

THE HALL MAMMOTH INCUBATOR CO.

UTICA, N. Y.



ONE OF THE SIGHTS IN OUR PARK

We carry the largest stock in America of ornamental birds and animals. Nearly 60 acres of land entirely devoted to our business.

Beautiful Swans, Fancy Pheasants, Peafowl, Cranes, Storks, Flamingoes, Ostriches, Ornamental Ducks and Geese, etc., for private parks and fanciers. Also Hungarian Partridges, Pheasants, Quail, Wild Ducks and Geese, Deer, Rabbits, etc., for stocking preserves. Good healthy stock at right prices.

Write us what you want.

WENZ & MACKENSEN

Proprietors of Pennsylvania Pheasantry and Game Park

Dept. "H. G." Bucks County, Yardly, Pa.

PRIZE WINNING STOCK

English Toy Spaniels, Prince Charles, Rubys, Blenheim
From Prize Winning Stock. Low to close

WILLOUGHBY KENNELS, NORFOLK, VA.

DON'T BUILD!

A \$25.00 House.



6x6-foot Portable House equipped with 4-ft., 2-perch Potter Hennerly Outfit for 15 hens. Complete with floor, etc.,

or fix up your hen-house until you get our two large catalogs (132 pages, over 150 illustrations), showing POTTER PORTABLE POULTRY HOUSES and fixtures in all styles and sizes.

FOR TEN YEARS

we have been making these goods. They are tried and tested and used by thousands of poultry keepers.

YOU CANNOT AFFORD to be without POTTER-made goods. They'll give satisfaction and save you time, labor and worry in your poultry work. Made for a purpose, and made right.

Our catalogs mailed promptly for 2 red stamps to cover postage. Write to-day and learn about Potter Poultry Products for particular poultry people.

POTTER & CO., Box 77. Downer's Grove, Illinois

G. D. TILLEY

Naturalist

Rare Land and Water Birds

Swans, Geese, Ducks, Peafowl, Cranes, Pheasants, etc. I am the oldest established and largest exclusive dealer in ornamental birds in America.

G. D. TILLEY, Naturalist
DARIEN, CONNECTICUT

is often mixed in a mash—either a dry mash or a wet one. It is highly concentrated and only a little should be used or the hens may reject the mash. Although it is not as good, common hay may also be steamed and fed in the way described.

If rye is planted in the fall, it often will attain a sufficient growth so that the hens can feed on it when the weather is such that they can be allowed their liberty in winter. In the middle states and those farther south, this is an excellent plan, and in the north poultrymen have found it desirable to grow winter rye on which the birds can be turned early in spring. Sometimes it is possible to use the rye as a cover crop in an orchard, so that two purposes, both of them good, are served.

Many amateurs and some professional poultrymen are feeding sprouted oats regularly, and with success. The plan is now well known, although long and profitably boomed as a "secret." The oats are placed in a box and wet down, being kept dampened until they sprout. The hens are very fond of the sprouts.

Many vegetables may be used, although perhaps not as good as the clover hay or the sprouted oats. Potatoes should not be fed raw, on account of their starchy nature. Cabbages are an old stand-by, but the hens should not be obliged to strain themselves in order to reach them, when the heads are suspended from a string in the old-fashioned way.

E. I. F.



A Baker's Dozen of Old English Teacups

AMONG these thirteen tea cups and saucers are a number of Staffordshire pieces. While the first in line, a gilt-banded white china one, is not in that category, the big blue and white one with no handles, next it, is. Its design of a mother with two offspring at her knees suggests "Cornelia and Her Jewels," with its Roman statuary, arches and columns in the background of white. Cups were made without handles and a number in this collection show that feature of the potters' work, who made tea sets in the last part of the eighteenth and the first part of the nineteenth centuries. This large blue and white creation has a fine border inside the cup of an inch and a half with urns and trees in medallions, with scrolls. Its capacity is large, holding a half pint and probably the tea taster of the Colonial days had no fault to find with that part of it. The next smaller blue one without a handle also, is a beautiful piece with its bright blue decoration on white, with tiny conventional border at the top outside, and inside, a two-inch one of floral design, and a tiny scene in the bottom of the cup of a castle and palm trees. On the outside also is a fine Saracen rider on a fully-caparisoned steed, with Angora-like mane and tail. The same



Let the pleasant memories that you have brought back from your Italian visits to the famous gardens of Italy be recalled to you by the reproductions of Old World masterpieces that adorn your estate.

We produce them in Pompeian Stone, an artificial product that is made to closely resemble marble and is far less expensive.

During the winter months, when you are determining upon improvements for your country place, you should have our catalogue D with its 800 suggestions at hand. Send for it to-day. Booklet, "City Back Yards," will interest city dwellers.

THE ERKINS STUDIOS

226 Lexington Ave., N. Y. Factory: Astoria, L. I.
New York Selling Agents—Recceri Florentine Terra Cotta.



White Orpingtons

They lay like slot machines. My birds have won at Madison Square, Pittsburg, Cleveland, Buffalo, Chicago and other large shows. New catalog free.

Lawrence Jackson

Hoyaville, Allegheny Co., Pa.

Maplecroft Rhode Island Reds
win at all the leading shows. "It pays to buy the best." Stock and Eggs for sale in large quantities. Send for Circular and Mating List of S. C. Reds. J. G. Dutcher, Prop. Address **Maplecroft Farms, Pawling, New York**



We make the finest stone furniture for Houses and Gardens from old models or Architects designs and ship all over the world.

BENCHES, VASES
COLUMNS, FONTS

FRANCIS HOWARD

EXPERT

5 W. 28th St., N.Y. City

Send 15c. for Catalogue

castle and trees appear as in the bottom of the cup, with the addition of a Gothic archway through which the rider has just come. The fourth cup on the top row is a Chelsea one, with purplish-blue flowers in raised work on a white ground, as is the one below it on the second shelf, with the addition of a little tracery of gold lustre added to the flowers.

Beginning with the second row is a gilt-and-white china cup and saucer with graceful handle and bands of gold with the spring pattern. Then follow the two in blue without handles, the first with smooth rims of cup and saucer, has sixteen radiating sections in the saucer and thirteen in the cup (a baker's dozen). It bears the impressed mark of Alcock, one of the Staffordshire potters and "Oriental, Stone" and the word, "Scinde" in a blue-bordered ellipse. The one next it has "Davenport" impressed with an anchor and the word, "Amoy" in small blue platter-shaped design and the same number of sections as in the Alcock piece. The rims of the Davenport one are slightly scalloped



Thirteen of the old English tea cups that have the advantage of being attractive and rare.

in both pieces. As the Chelsea piece which follows was described below, we go on to the last row, which begins with a lovely pink, green and gold lustre cup and saucer, with pinkish-gold band and mountain scenery, with deer in the foreground on the saucer, and the same general scene with equestriennes and pedestriennes in the place of the grazing deer and doe. The cup and saucer following the pink-lustre one is blue and white, of the Staffordshire class, and shows little white, except inside the cup. It has an Oriental picture on it with temples, palms and a loaded camel, with floral design also. The King of Cups is next in line, and while the Colonial tea drinkers acquiesced in the size of the "Cornelia-and-Her-Jewels" one, they would make obeisance to this generous cup of the days of our forefathers, holding as it does more than half a pint. The modest little calico blue and white combination next the last in the collection has a deep border in and outside, with urn and "cattle on a thousand hills" in the bottom of the cup, while the thirteenth is a pink, green, gold and white lustre piece of pink flowers, with narrow gold rim. J. W. C.

Fresh Air Heating and Ventilating



Kelsey Heated Ardmore, Pa.
Bunting and Shrigley, Philadelphia Architects.

Let Us Send You Our New Booklets

so that you may know why 40,000 home owners who investigated and wanted good ventilation and economical heating installed

KELSEY WARM GENERATORS

For houses of any size from 5 to 75 rooms, Kelsey heating is worthy of your careful consideration.

KELSEY HEATING CO.,

Main Office: 66 E. FAYETTE ST., SYRACUSE, N. Y.
New York Office: 154c. Fifth Ave.

Get Our Catalog And save 20 to 40 per cent.

Our unusual facilities and plan of dealing direct enable us to sell gas and electric lighting fixtures of every kind at prices far below your local dealers'. In high artistic value and practical efficiency it will be hard to duplicate our goods at any price—save in a few of the largest cities. Photographic illustrations. Clear descriptions. Easy to select.



No. 540--4
light electric. Heavy base and shade. Height 24 1/2 in. Empire bronze finish.

SAMPSON & ALLEN

HOME LIGHTING

We save you money and guarantee safe delivery. Goods may be returned at our expense if not satisfactory. **SAMPSON & ALLEN** Established 1891 2 Exchange St. Lynn, Mass. The Electric City

"CRAFTSMAN" HOUSE PLANS FREE



Send for a copy of "24 CRAFTSMAN HOUSES," showing exterior and floor plans of 24 houses that cost from \$500 up to \$10,000. To interest you in our magazine, "THE CRAFTSMAN," our FINE HOUSE PLANS and in Craft articles, we will also send you a beautifully printed 32-page booklet entitled "The Craftsman House." If you are interested at all, both of these books will be very useful to you.

"THE CRAFTSMAN IDEA" means REAL HOMES, not mere houses; it shows you how to save money on useless partitions—how to avoid over-decoration, how to get wide sweeps of space (even in a small house), restful tones that match and blend—and enables anyone to always have a beautiful and artistic home.

"THE CRAFTSMAN MAGAZINE" treats of building, furnishing and beautifying homes—of art-embroidery—cabinet work—and kindred topics. In the Magazine each month are published the plans of two new and entirely different houses. Already we have shown 125 houses, and you can have your own choices.

"CRAFTSMAN HOMES," by Gustav Stickley, 256 pages, beautifully bound and printed, treats of home building, home making, home furnishing in full.

EDGAR E. PHILLIPS, Manager "THE CRAFTSMAN" Room 292, 41 W. 34th St. New York City

Let VOGUE

do your

Christmas Shopping

YOU are invited to let VOGUE do your Christmas shopping. This means that you will be spared every particle of the actual effort and trouble usually associated with the holiday shopping season. You will not have to await your turn to be waited upon in crowded shops—you will not have to make your selections from a perplexing assortment of good, bad and indifferent offerings.

On the contrary, you will make your selections in the quiet of your own home, and from a carefully edited list of the best articles offered this year by the leading shops of New York. And when your selections are made, VOGUE will attend to the purchase and transportation of the gifts you desire to buy. There is no charge whatever for this service—it is offered free of cost to every reader of VOGUE.

Merely secure the Christmas Gifts Number of VOGUE. It contains illustrations and descriptions, with prices, of the most acceptable gifts to be had in New York for men, women and children. Approximately twelve hundred Christmas gifts are pictured and described in this number. Select at leisure the things that will appeal most to your friends, and then let VOGUE buy them and send them to you.



Reduced black and white facsimile of cover design, Christmas Gifts Number.

VOGUE'S Christmas offer has been especially appreciated in the past by women who live at a distance from New York. To women living near the metropolis this service is a convenience—to women living at a distance it solves the entire Christmas gift problem.

If you live in a small town, your choice of Christmas presents is limited to a few articles which you cannot help feeling that all your friends have already seen, and priced. But by letting VOGUE do your shopping, you bring to your very door the best metropolitan shops, brimming with gifts which none of your friends can possibly have seen. You will do your shopping in New York, and the recipients of your gifts will be quick to know and

appreciate your resourcefulness.

Secure without fail the Christmas Gifts Number of VOGUE. It can be had from your newsdealer, or we will send it to you direct on receipt of twenty-five cents. With this number of VOGUE in hand, you will make this Christmas a memorable one for your friends, and you will also save yourself an almost incredible amount of expense, trouble and worry. Get the Christmas Gifts Number of VOGUE to-day.

To save yourself time, trouble and expense—to make Christmas shopping, both easy and satisfactory—you should secure immediately your copy of the Christmas Gifts Number of VOGUE.

VOGUE as a Christmas Gift

VOGUE itself makes a splendid Christmas gift—probably the very best you can give to every woman of discrimination on your Christmas list. To send VOGUE for one year to a friend, merely clip the attached coupon, fill in her name and yours and mail to us with four dollars. Your friend's subscription will begin with VOGUE dated January first, appearing December twenty-sixth and we will send her a special VOGUE Christmas Card to announce the coming of your gift.



VOGUE, 443 Fourth Avenue, New York.

For the remittance of four dollars enclosed, please send VOGUE for one year as my Christmas gift to

Name of recipient _____

Street _____

City _____ State _____

Your special Christmas card is to be received by her on Christmas morning.

Name of sender _____

Address _____

THE DECEMBER TRAVEL

"Behind The Scenes in China"

MOST AMAZING ARTICLE OF THE YEAR

By the PRINCESS DER LING

WRITTEN by the First Lady In Waiting to the late Empress Dowager of China, this article of life in The Forbidden City can be unquestionably accepted as a wholly veracious narrative. It tells of court life among the



The Late Empress Dowager

highest potentates and officials of the Chinese Empire. It discloses facts which have never before been in print, and which are of especial significance at this time of revolution in China.

IN THE SANTA BARBARA BACK-COUNTRY

Nearly everybody has heard of Santa Barbara, but few people know of the charm of the country in behind the hills. Here are ranches covering thousands of acres—some as many as 70,000—places where you may see the *vaquero* rope steers from his horse with the old-time dash of Mexican days. The author, Charles F. Saunders, makes you want to follow him both "afoot and a-horseback" through this region.

WITH CANNIBALS OF THE SOUTH SEAS

Some of Uncle Sam's battleships, cruising in the South Seas, stopped at Admiralty Island. Black men came out in oddly fashioned boats to meet them. This narrative of how the ships landed a detachment and made friends with the cannibals reads like a story by Jules Verne.

PLANTATIONS OF THE OLD DOMINION

By Eugene P. Lyle, Jr., tells of a Virginia plantation of to-day and contrasts it with that of ante-bellum times. The "plantation" has passed—it is a "farm" now.

THREE ITALIAN HILL TOWNS

The Easily accessible but seldom visited Umbrian hill towns of Spello, Narni, and Trevi are shown by Russell W. Leary, to have all the charm of some of the better known places. You'll decide to visit them next time you go to Italy.

MEDIEVAL VITRÉ

Pictured graphically by the pen and camera of B. M. Trebor, this medieval city of Brittany once more becomes a Twentieth Century reality. The people and their environment to-day are in strange accord with the spirit of yesterday.

EXCURSIONS ABOUT AMSTERDAM

This is Blair Jaekel's third article on the Netherlands. We've been receiving letters of appreciation from our readers with regard to this series. The author combines a keenly observant eye with a sense of dry humor, and the result is a treat.

A California Supplement containing three special articles about the Golden State. A guide to California for the tourist and settler.

BE SURE TO GET THIS ISSUE OF TRAVEL

Subscribe now, and we will send you this number with our compliments and start your subscription with the January Number.

WHY NOT send a friend a year's subscription to TRAVEL as a Christmas remembrance? It multiplies a gift by twelve.

McBRIDE, NAST & CO., Publishers,
31 East 17th Street, New York

**Mc
Bride,
Nast & Co.**
31 East 17th Street,
New York City

Enclosed please
find \$3 for a year's
subscription to *Travel*,
starting January and in-
cluding the December
number, Free.

NAME _____
ADDRESS _____

SARGENT

Hardware

Beauty of design and finish without;
honest metal and solid quality within.

The fine workmanship that distinguishes all Sargent Hardware is peculiarly valuable in Sargent Locks. Every part is accurately fitted to work easily and quietly. They are the finest development of correct lock principles and afford maximum security.

The new Congressional Office Building at Washington, containing valuable records, is fitted throughout with Sargent Hardware and Sargent Locks.

There are Sargent Door Locks suitable for all purposes. Any hardware dealer can furnish them.

Sargent Book of Designs

—mailed free

shows hardware patterns to harmonize with every style of architecture. If you are interested in building, write for it. Colonial Book also sent on request.

SARGENT & COMPANY

142 Leonard St., New York



The Heating Question Solved

If you are tired of underheated or overheated rooms, tired of continual trips up and down stairs to change drafts and dampers in an effort to keep the furnace regulated.

If this daily grind bores you, send for our interesting booklet "Automatic Comfort." It tells how heating troubles are banished by using the simple and inexpensive

Crandon

Automatic Damper Regulator "The Janitor That Never Sleeps"

Regulates hot-air, hot-water or steam-heating systems. Wonderful in its efficiency and so simple that anyone can install it.

A small mechanical thermometer in your living-room regulates the furnace draft and check dampers before the heat can vary one degree above or below the desired temperature.

30 Days' Trial at Our Risk

We will refund price without question if a "Crandon" does not prove the acme of convenience, and a fuel-saver as well.

NOW, while you think of it,
write for booklet H.

The Crandon Manufacturing Co.
BELLOWS FALLS, VERMONT

HAVE MUNSON-WHITAKER CO INSPECT YOUR ORCHARDS



Send for our booklet—"Trees—The Care They Should Have."
It tells you some valuable things about trees and orchards.

MUNSON-WHITAKER COMPANY, Foresters

BOSTON—623 Tremont Bldg. NEW YORK—823 Fourth Ave. Bldg. PITTSBURGH—743 Oliver Bldg.

ATTEND TO YOUR TREES

Shapely, healthy trees add real value to your estate. We are practical in the planting and preservation of Shade Trees and renovating Orchards.

All our work fully guaranteed, and we make a careful inspection bi-yearly for three years on completed work.

We can show you a profit on your orchard. A request will bring our representative or booklet A as you desire.



Appleton & Sewall Co

Foresters

156 Fifth Avenue, New York

Old Town, Me.

Bangor, Me.

References: Yale University, Bowdoin College, City of Bangor, Pork Dept.



Contents-December, 1911



COVER DESIGN:

From a photograph by Herbert D. Angell

FRONTISPIECE: AN ENGLISH HOME

THE NORTHERN TRADITION.....	361
<i>By Alfred Morton Githens</i>	
THE NATURALIZATION OF A CITY MAN.....	365
THE SMOKELESS FIREPLACE.....	368
<i>By E. O. Calvene</i>	
THE MAKING OF A DISTINCTIVE HOME.....	369
<i>By Louise Shrimpton</i>	
WHEN AND HOW TO DO WINTER SPRAYING.....	373
<i>By F. F. Rockwell</i>	
HOMES THAT ARCHITECTS HAVE BUILT FOR THEMSELVES, III	375
<i>The Long Island Home of Mr. Thomas Hastings at Westbury</i>	
BEAUTIFYING THE BATHROOM.....	378
<i>By Lydia LeBaron Walker</i>	
HOW WE FURNISHED THE CHALET.....	380
<i>By Helen Ray</i>	
A PAGE OF INGLENOOKS.....	382
THE CASE FOR STEAM HEATING.....	383
<i>By A. Masterson Plummer</i>	
FEEDING THE BIRDS IN WINTER.....	385
<i>By Hanna Rion</i>	
THE HOME OF MR. GEORGE W. MASSEY, LAMBERTVILLE, N. J.	388
<i>C. E. Schmerhorn and Wilson K. Philips, architects</i>	
INSIDE THE HOUSE.....	390
Inexpensive Furnishing	Decorating Over Wall Paper
Rag Rugs	Wicker Trays
GARDEN SUGGESTIONS AND QUERIES.....	392
Mulching Ivy	Fruit and Vegetables in Storage
Plants in the House	Planning Garden Work
EDITORIAL	394
The Successful Suburban Place	Winter Ration for Poultry
	Naming the Country House

Copyright, 1911, by McBride, Nast & Co.

HENRY H. SAYLOR, EDITOR

McBRIDE, NAST & CO.

31 EAST 17th STREET
UNION SQUARE NORTH

NEW YORK CITY

Robert M. McBride, President; Condé Nast, Vice-President; Robert F. MacClelland, Secretary; Henry H. Saylor, Treasurer. Published Monthly. 25 cents per Copy. \$3.00 per Year. For Foreign Postage, add \$1.00; Canadian, 50c. Entered as Second-class matter at the Postoffice, New York, N. Y.

VOLUME XX



NUMBER 6





"The Orchards," by Edwin L. Lutyens, architect; a modern English example of the purest Northern Tradition, showing the English character in the roof of maximum pitch, the grouped windows and the marked predominance of chimney-stacks.



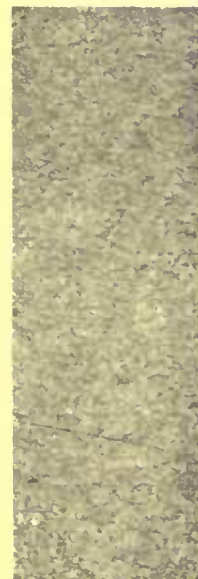
House & Garden



VOLUME XX

December, 1911

NUMBER 6



The Northern Tradition

BY ALFRED MORTON GITHENS

Photographs by the author, H. H. S., and others

[The problem of choosing an architectural style for the American country or suburban home is one of the most puzzling that confront the home-builder. In order to bring about a better understanding of the more common types and with the idea of clarifying, as far as possible, this whole matter, we have asked a number of prominent architects to present each the case for one particular style. In previous issues the characteristic features of the Colonial, Dutch Colonial, Half-timber, English Plaster, Chicago School of Architecture and Swiss Chalet type were developed and illustrated at length by prominent architects interested in each of these types. There remain two or three of the more common styles which will be taken up in future issues.—EDITOR.]

WHEN the editors of House and Garden ask the most fitting style for an American country house—by which presumably they mean the style proper to the major part of the United States, not South America or Southern California, with their different materials and traditions—the self-evident answer seems to be, “That style which is the natural expression of our building materials and constructive problems.”

A house, after all, is an enclosure of walls with a roof over it. Now, no matter what the material, walls are vertical always and windows and doors are merely holes in them. But the roofs vary in character with the material used, and seem to



At Bronxville, New York, by Wm. A. Bates, architect; showing the type-resemblance to the old New York barn above, though it suggests a different wing composition suited to a different setting.

give the first broad impression. An Eastern house, and one pictures high parapet walls and hidden behind them a flat, clay roof where the master walks in the cool of the day; a house of the romance countries, Italy, Spain or Southern France, and one sees gently sloping tile roofs and broad eaves; Northern France suggests the excessively steep slate of Normandy farms or the chateaux of the Loire; Germany and Britain, and whatever the so-called “style,” the roof-slope is neither steep like the Norman or flat like the Southern, but a half-way pitch, generally ending in gabled walls. A child draws a house on his slate and though one cannot



Farmhouse at Cornish, New Hampshire, showing the alteration of an old house without the destruction of its original character of roof lines

tell whether it be "Gothic" or "Colonial," still it never fails to show the roof-slope. Perhaps the roof should be the standard of classification, that just as a fossil-hunter ignores at first all other structure and broadly classifies his skeletons by the tooth formation, so the philosopher-architect should look to his roofs for guidance, the teeth of the house as it were.

Roof-slope seemingly should be determined by the materials used. Tin we have apparently discarded; interlocking tile is so expensive that for the immediate future it will not be common enough to count in the average; so the slope must be determined by slate and shingles. Build the roof flatter than thirty degrees, and rain and snow will drift in; steeper than forty-five degrees or fifty, and space is wasted and money with it; narrow

limits indeed—enough, it seems, to form a dominant character.

If this argument is just, then the conclusions must have been reached long ago. They should be found chrystalized as a type in use ever since building with these materials began. Fads and fashions might assert themselves for awhile, but after each there should be a recurrence to the type.

If we follow the history of country houses in a northern country, England for example, as it is best known, we find striking proofs of this surmise. The builder of the Middle Ages knew nothing of distant lands, had nothing to copy, and therefore his houses should obey this natural law as to slope without attempt at concealment, and so they do; so do the later houses without exception down to Elizabeth's time, when certain men masked their roofs with high parapets as at Hatfield or Bramshill; a few years, and under King James the fad is forgotten and the true tradition revives.



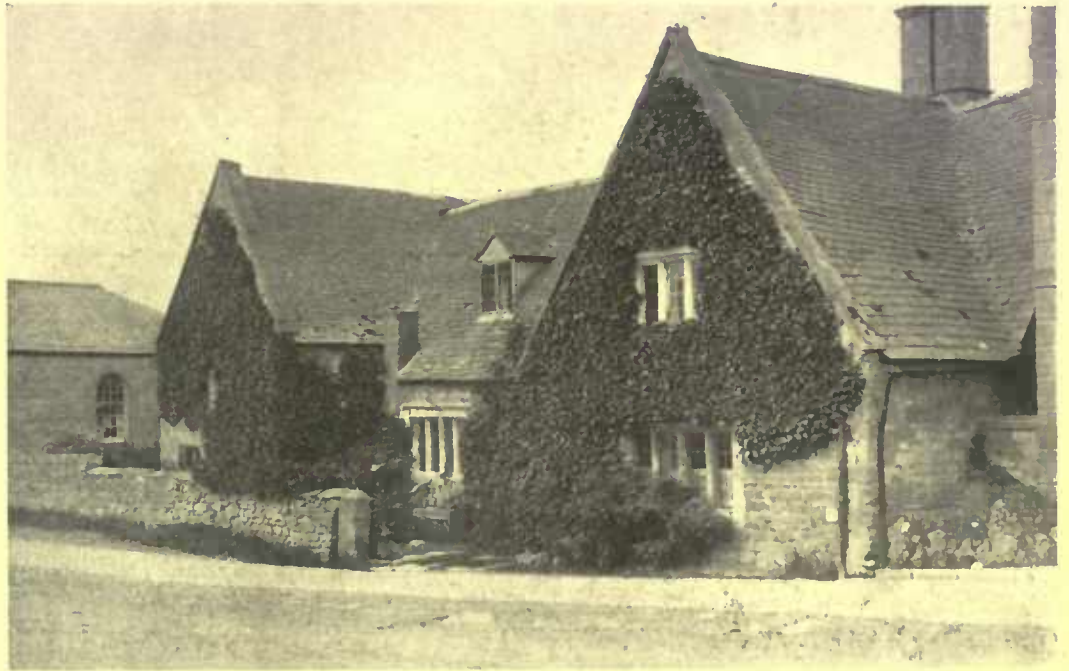
A house at Mianus, Connecticut; an early example of the forerunner and inspiration of much that is evidenced and delineated in the Woodmere type below



At Woodmere, Long Island, C. Barton Keen, architect; and "Grayeyes," at New Rochelle, Wilson Eyre, architect; two totally different American developments of the Northern Tradition, but the photographs show that the houses would not be inharmonious if juxtaposed, and show further the variations of this architectural style

The high renaissance comes with its artificiality and the type is banished to the simpler houses of the countryside or the colonies. These recognize the classic revival by veneering a pilaster each side the entrance door, by inventing a sort of pediment to put over them, by elaborating the eaves into a cornice and perhaps adopting a more orderly arrangement of windows, but otherwise the type is little altered.

Then why not this for the answer to the question—this nameless basic type which one writer calls the "English Tradition," though it was the tradition equally of Scotland, of Ireland, of the American colonies and it seems most northern countries? Its characteristics are its roof-pitch, its gables (for gables are simpler than hipped roofs framed to slope back at the ends of the house), the moderate overhang of roof (for broad eaves shut out the sunlight which in the north we need), and the importance given to chimneys. Examples of



In the Midlands, England. An early type-example of the Northern Tradition in its simplest form, depending for its interest on strong mass and vigorous outline rather than on detail



Stratford Lodge, near Philadelphia, C. Barton Keen, architect; a type of the true tradition, but showing the possibilities of an adaptation of the Italian pergola-enclosed garden

it are the Tudor country houses, the simpler of the Georgian, the Colonial of the northern states, barring those of them showing the worst artificialities; the Dutch Colonial, with its thrifty gambrel roof, framed to get most with least expense, and purest of all the farmhouses and barns here and in Northern Europe. Just now the type seems undergoing a curious development in England, a complication of many gables, of strange and restless oddities of contorted, half-developed forms, the picturesque run wild. In America, Procrustes-like, we stretch it to fit a repertoire of "styles"—loaded with false half-timber to wear its appearance of some centuries ago; decked with pilasters in the fond hope that it will appear "classic" or what is called "Colonial"; shorn of its gables, with roof depressed and wide eaves, it is "Italian."



"Two Stacks" near Philadelphia, Charles Z. Klauder, architect; Garden and Entrance fronts; the first informal with irregular gables and low eaves, the entrance front with lofty walls, severely symmetrical but not at all monotonous, as life is injected by choosing the stones for their color and texture, which makes unnecessary and superfluous all exterior decoration.



At Villa Nova, C. Barton Keen, architect; crowning the spur of a hill, its long roof-lines appear almost as a continuation of the hill-slope a successful solution of that most difficult of architectural problems, an encircling veranda. This view shows what is offered by this type in the way of natural embellishment

was designing in "Gothic," or the early settler that he was doing "Dutch Colonial." Let us beg the question then, and argue for a certain type, rather. "Grayeyres," "Two Stacks," "Stratford Lodge" or the Villa Nova or Woodmere houses are pure examples, but what can they be called more than "Northern Tradition?" As far as I can see there is nothing in them, not a natural expression of construction. The stout stone columns were doubtless taken from the old barns near Philadelphia, the pergola surely from Italy, the porch about the Villa Nova house from nowhere at all, but each is perfectly

(Continued on page 414)

One enters a certain suburb of New York. All the houses are new; no buildings were there a year or two ago; it was a clear field for architects to do what they could, for the promoters were anxious to make it an ideal suburb; yet its general impression is discordant in the extreme. Houses are individually most interesting, far above those of the average town in character, yet it is one of the most unpleasant towns one ever sees. One leaves it with discouragement, with the impression that our country architecture is resulting in a condition worse than the much-despised mid-nineteenth century, when at least there was a certain harmony; that our study, our familiarity with the best work in the world has resulted in nothing; that "the mountain has labored and brought forth a mouse."

One passes "Colonial," "half-timber," "modern English plaster," "thatched shingle roofs," "Italian adaptations"—all seriously studied too, and most of the houses distinctly good according to their several ideals—and the result is wildest discord. Each house strives to assert its independence and drown its fellow. It is as if in an opera Brünnhilde and Carmen, Yum-Yum and Aïda, Thaïs and the Runaway Girl were all on the stage together, answering each to each in her own song, some serious, some frivolous, each admirable, and the result diabolical.

An English or a German town never gives this impression. Is it possible that there they have a clearer conception of the basic type? One house may have the orderly arrangement of the Georges and the next a Tudor-arched doorway and mullioned windows, but the difference seems rather interesting. Is it because they are all perfectly natural in their use of materials and roof forms, members of the same family, so to speak, all examples of the same traditional type, nearer, perhaps, than their builders realized or that one can recognize at present on account of his having befogged his wits with much reading of the characteristics of these "styles?"

But this was to be an article upholding a certain "style!"

Until a style is past and done with, it has no name. The medieval architect would have been much surprised to learn that he



An old example of irregular, clustered gables, by the Mianus River, Connecticut



At Lake Mahopac, J. H. Phillips, architect; altogether irregular but unmistakable in type; relying on naiveté and picturesqueness rather than on studied composition

The Naturalizing of a City Man

Editor's Note:—The author of this narrative had refused to write the story of his experiences in going from business life to a farm. His objection was that the published account taken from his closely written diary would contain nothing of the joy and inspiration he felt in getting close to Nature, and would be merely a matter-of-fact list of happenings with their message lost. He finally consented to write it in his own way, allowing memory and imagination to lend color to those days of struggle which are now cherished recollections. He preferred to hide his identity under the disguise of another person, but the essential facts are true and full of practical information. This number deals with the key to his reformation; subsequent installments will show how he succeeded.

MANTELL climbed wearily up the stone steps of his house, and paused disconsolately to note the holly wreath with its satin ribbon behind the rich Cluny curtain. Irresolutely he fumbled with his bunch of keys, and slowly unlocked the heavy inside door.

His wife stepped anxiously from an adjoining room to meet him.

"You're late again, Henry," she said, placing a sympathetic hand on his arm. "Are they still fighting? Can't you call a truce even for the holidays?"

"Hush," he answered, "we'll talk upstairs. The children may be around." He snapped on the light, drew down the shade, and locked the door. Then he stood facing his wife.

"Helen," he said, "you may as well know the worst at the outset. They've won. I'm ruined."

There was nothing theatrical about his manner. So low and even was his voice that the woman did not at first realize the importance of his words. Her brain struggled for a moment to reconcile his calmness with the gravity of the subject.

"You're tired, Chic," she said finally. "You're blue. I know it's not so bad as all that. Try to forget it all for a few days, and when you go back things will look better."

They had proceeded to the room above and he drew the heavy curtain across the doorway after them. The woman sank down into the great chair by the center table, and the man went over to the gas log and stood with his hands behind him as one who would warm himself, although the room was at more than summer temperature.

"I wish you were right, dear," he said slowly, "but there's no use disguising matters. They have bought over Lawson and with him, of course, the new patents. Not content with that, they have brought pressure to bear in another vital matter; my credit is gone! I am helpless, absolutely helpless. They can put me into bankruptcy the minute they say the word—as easily as I could press that button for Annie."

There was a full minute's silence. Muffled, dulled, far away, the harsh voices of the street leaked in upon them. Then Mr. Mantell laughed bitterly. "My business is the least of my troubles now. I don't know which way I shall turn when I do think of it again. But day after to-morrow's Christmas, and the kids—?

"There," he added, taking from his pocket and tossing over a very slim green roll, "there's every cent we've got."

She came over to where he stood, lost in thought, and placed a white hand on each of the slightly stooped shoulders. "It's not so bad," she urged, "we were poor before."

"Yes," he answered, "yes, I know. But this is different, quite different. Then we had the future before us, wealth to be won, success to be attained. I worked for it; I earned it; I had achieved a substantial start—and now, poof!—like a child's bubble, it bursts between my fingers—and through no fault of my own. I do not understand it. I give it up. And yet in a way it is all clear. I can see just how they've done me; how I had to lose. But it doesn't seem fair somehow. It's all out of line with what they used to teach us about life."

"Come," said his wife, with assumed sternness, shaking him by the arm. "Come, you can philosophize better after a square meal. It's spoiling now. Besides, I have a card up my sleeve." (He laughed and pinched her smooth bare forearm.) "You remember Uncle Jay's mysterious wedding gift—the big gold key and the little black box that was never to be opened until misfortune overtook us? Come on, dear, and after dinner we'll open it." And she led him from the room.

Some time later they sat alone before the gas log, the mysterious box between them.

"Uncle Jay was something of a miser as well as a little 'off'," said Mr. Mantell. "Who knows what tricks he was up to? That

key alone, as I remember it, that must be worth a good deal in itself. Let's see how it has stood the years." His wife tore open a faded envelope and extracted a large key. It glittered warmly in the firelight as she passed it over to him. Its shining was reflected in her eyes.

"By George," said her husband, "I had forgotten how big it was." He inspected the key carefully. "Looks like the real thing, too. It must weigh several ounces. At eighteen dollars an ounce it won't buy an automobile, but it will tide us over Christmas all right. What do you suppose the miser put in that box, it's so thin and light? Seems like a fairy story to be opening it after all these years."

As Mr. Mantell passed back the key his wife's fingers actually trembled a little and it dropped to the hearth. Not a dull, golden sound, nor even a metallic tinkle, but a clear, ringing clink struck their ears.



To the accompaniment of cheery sleigh bells they sped past peaceful homesteads and snow-blanketed white hills contrasted with the dark fir trees

"Why that—that sounded like iron," exclaimed Mr. Mantell, in a voice that suggested some disappointment. He picked the key up, and applied to it the point of his penknife. "Just the thinnest coating of gold," he asserted. "It's too bad, dear."

"But the box," insisted Mrs. Mantell, trying bravely to hide her disappointment. "I still have faith in Uncle Jay's present—even if people didn't understand his peculiar ways. What do you suppose is in it?"

"Diamonds," said Mr. Mantell, with a smile, "made of the best of glass."

"Henry!" expostulated his wife. "You don't deserve any Christmas. No fairy would stay in the room with you a minute. It might be——"

"It might be," he concluded for her, and more than half in seriousness, "his savings bank account. Compound interest for seventeen years—that would be quite a nice fairy."

The big key clicked in the big lock on the little box.

"Oh-h," said Mrs. Mantell simply, but with a falling inflection that expressed more than many words. She passed the box to her husband with one hand, and with the other sought for her handkerchief. Mr. Mantell gave one look and then threw back his head and laughed loud and long—laughed as she had not heard him laugh in years.

"Henry! how can you!" she exclaimed, dashing the tears from her shining eyes. "You're too cruel for words."

He put one arm around his wife's shoulders and kissed her. "Never mind, Pet," he said, atoning. "Look, here's something on the card."

Together they bent over the photograph of a rambling country house which the box contained, and read, in the jet-black, hair-line chirography of the long deceased Uncle Jay:

"The roof is tight,
The taxes paid.
Come back home,
When the game is played."

"Abominable grammar," said Mr. Mantell—"most abominable. But say, what do you know about that! What good does this do us? I suppose the place was worth about \$3,000 then; it must be worth about \$300 now."

"You are quite a brute," replied his wife, suddenly all eagerness in voice and manner. "You don't deserve any Christmas at all. You don't recognize the gifts of the Magi when they're showered upon you. You can do what you please, but Robert and Helen and I are going to spend Christmas in the country—the real country—and have the lark of our lives."

"Nonsense, Helen, nonsense," he protested, catching her intention and alarmed at her earnestness. "Why it would be the height of folly. It's impossible. Think of the——"

"Think—think!" she contested, of course warming to her theme under opposition, "we've done nothing but think for years. Think and plot and work for a life here, in a brick cage with lace curtains. I won't think. We've got plenty of money for carfares and that settles it. It will be more fun for Rob and Helen than anything else we could possibly do. Now don't try to reason with me, because I won't reason."

Well, it doesn't take a philosopher to know that when a pretty

woman gets a silly idea wedged nicely and firmly into her imaginative head it can be dislodged about as easily as a capsized canoe may be paddled up a rapids. Besides, Henry Mantell always secretly admired these infrequent unreasonable or super-reasonable moods in his capable wife. So the natural up-shot of the matter was that a late hour found them sitting before the hearth discussing the exciting details of their strange adventure to winter-bound Arcadia.

For the sake of the artistic touch the dying flames and the sinking embers should close the scene, but the flames only flickered back and forth over the changeless logs, with a slightly gassy smell, for a genuine fireplace and a real fire was a luxury they had desired, but never quite felt they could afford.

II.

The agent at Priestly Junction received a somewhat disjointed telegram the next day that requested him to have carriages at the 5:23 train to take four passengers and two trunks to the old Rasmunsen place, and have half a cord of cut wood delivered there immediately. Six dollars to defray expenses had been paid at the sending office.

Accordingly when the 5:23 pulled in that night—at 5:56—Mr. Mantell found awaiting him the express agent, telegraph operator, baggage master and ticket agent in the presence of Bill and his co-worker; the chief of police and postmaster in the person of Mr. Hutchins; and Priestly Junction's leading merchant, citizen and liveryman in the rather stout personage of Mr. Logan; who had all been attracted by the somewhat mysterious and very unusual message. There also awaited him several lesser lights, and in addition the

very definite rumor that he was a millionaire broker escaping for a quiet Christmas in the country with a prominent actress, who would undoubtedly have been recognized if venturing to any more populous center than Priestly Junction. The appearance of Bob and Helen, however, full of energy suppressed by half a day's ride in a slow train, very shortly dissipated the supposition for one several shades nearer the truth.

The postmaster, with all the dignity at his command, introduced himself and then his companions and after a brief inspection of trunks and bags, Mr. Mantell brought on the first shock by stating that before driving out to the place they wanted to secure a few provisions. Bill and his partner looked at each other with a double grin. The postmaster looked at Mr. Logan, and Priestly Junction's foremost citizen looked at the station platform.

"Why-er-ye see, this 'ere aint much of a city," explained Mr. Logan. "We don't keep much of a line outside of gen'l groceries—soap, an' matches, an' clothes-lines, etc." He paused, for want of wares.

Mr. Mantell looked helplessly at his wife. Perhaps there was an expression of "I told you so" in his eye. At any rate she took matters into her own hands.

"Oh, we didn't want much," she volunteered. "Just a couple of chickens, and some cranberries, and sweet potatoes, and celery, and nuts, and lettuce, and cream."

Mr. Logan groaned aloud. "Celery—lettuce—cream," he puffed. "Why, Mam, we aint in the city, you must remember.



The rambling-roofed house nestling in the snow-covered hillside offered the appearance of welcome Christmas comfort

You're in the country out here, Mam, and what's more it's winter."

"What have you got?" she asked, a little alarmed.

"Why, Water's pink-label soups, an' Make-it-in-a-minute mince-meat, an' Gold Seal guaranteed near-butter, an'—why quite a line of such things. The drummer says they are all used quite free in Noo York."

"Where do you get anything fresh?" pleaded the woman.

"Oh, we do most of our buyin' down at Priestly," joined in the postmaster. "Last stop before this place, you came right through it."

"When is the next car back?" asked Bob, whose interest in the discussion of provisions was getting painfully acute.

"9:45—tomorrow morning," said Bill. "Only it don't run to-morrow, bein' Christmas."

"Look-a-here," interrupted Mr. Logan, with an expansive smile that indicated he had been hit by a happy thought, "it's only three miles back, and only one mile further out to the place than it is from here. We'll let the trunks go out direct, and we'll go by way of Priestly. The sleighin's good, an' it won't take much more'n half an hour longer—not includin' th' shoppin' of course," he added, with a timely thought on woman's ways.

Suit-cases and grips were put aboard the sled, and they piled in. Three miles over a smooth road, covered to the tune of cheery sleigh bells and to the time of Lute's long-striding mare "Fly-away," went quickly enough. As they flew past peaceful homestead and snow-blanketed white hills, with now and then the contrast of groups of dark firs, black as the heart of midnight, the satisfying consciousness came to them that all this fitted in with the spirit of their Christmas lark and that they were leaving the city and its troubles very far behind. The moon hung clear and full in the cloudless sky, and the keen, vitalizing air, rushed into their lungs, so long used to the desiccated atmosphere of city rooms, with almost the effect of an exhilarating cordial.

Mr. Mantell (thought his wife, as she eyed him sideways through her veil), looked ten years younger and twenty years more boyish than he had for a long time. As he glanced up suddenly he saw his wife's face clear cut in the moonlight. Her eyes were shining, her thin, delicately carved nostrils dilated with the sheer joy of life—life at the full tide, insurgent, resistless—and in that moment the blood rushed and swirled about his heart in the ancient, primal way that he had not experienced in years. It was a revelation of many things in a lightning flash; and now he sat wondering about it, wondering what had fallen out of his life, and how it had gone without his missing it, and why.

"Thar she lays," exclaimed Mr. Logan, rounding a sharp curve and flourishing his whip half way around the horizon. At the foot of a long hill, spread out before them like a photographed Christmas tree, sparkled the little city of Priestly.

A few minutes more found them in its shopping center, with a red-cheeked and suspiciously curve-nosed butcher explaining to Mrs. Mantell that his supply of holiday niceties was "direct and fresh from Boston," and the apples—he showed her the mark on the tissue wrapper enveloping each—from Oregon.

Apparently no one in the place, including several farmers from

the adjacent countryside, saw anything incongruous in the fact that squash, celery and lettuce were being supplied to them from a distant city, and apples from across a continent. Mr. Mantell, being a stranger, was struck by the fact that it seemed rather funny. Mrs. Mantell was struck by a fact that was not at all funny—the prices of all the nice things she had expected to find so cheap in the country, were in most cases higher than city prices. To keep inside the single green bill with a 5 in the corner, which she had set as the limit, she finally decided upon a pork roast instead of chicken, which really was the part of wisdom, for the pork was extra nice and the chickens were not. That was hardly their fault either, for several long months they had been freezing blue and pucker-skinned in storage awaiting the rush season.

When they finally reached the homestead, the trunks were awaiting them on the veranda, which faced south, and there also was piled half a cord of wood. This offset to some extent the inhospitable looks of closed blinds and boarded up doors; inhospitable, that is, to the extent that this low, rambling roofed, veranda-screened, nestling house could look inhospitable. Its whole appearance and attitude spoke a word of welcome, offered quietness and comfort.

Mrs. Mantell, inwardly somewhat agitated, tried the golden key in the lock of the wide door, entering the house from the veranda, the only one not boarded up. A final misgiving fluttered through her mind as to whether she had not been terribly foolish. Suppose it was wet and leaky? Wouldn't it be impossibly damp and musty? She set her lips firmly, exerted all the strength in her fingers, and the big bolt shot back.

"I christen it 'Pandora Cottage,'" she cried, stepping back, "for whatever comes out. Hope will remain here!" And she threw the big door open.

It was not at all bad; only "kinder like a front parlor after a funeral," as Mr. Logan lugubriously put it. Close, musty, a little dank, of course it was.

Mr. Mantell's camping experience had prompted the taking of a hatchet, and with the capable assistance of Mr. Logan and his man, a fire was soon roaring on the hearth. At first it wanted to smoulder and smoke and blow out into the room. But some dry old shingles, from a pile in the shed, soon had it sucking burning fragments of them bodily up the cavernous flue, and radiating a generous warmth out into the room.

Apparently everything had been left ready for immediate occupancy. An axe and a rusty saw were at hand in the well filled woodshed. Dishes and cooking utensils occupied their places on

shelves and nails in the kitchen.

The kitchen range stored a fire beautifully. Even the pump worked after a few minutes' operation, and though the water seemed all right, Mr. Mantell would not permit its use. So Rob and Helen got some from the well outside. One bucket leaked and the other was mossy, but the water was all right.

The trunks were brought in and began to yield up their useful contents. Supper was soon under way, with the women folks in charge, while Mr. Mantell and Rob explored the house. It had been left partly furnished and evidently with the idea that

(Continued on page 396)



Everything was apparently ready for immediate occupancy and the cavernous fireplace was suggestive of warmth and hospitality

The Smokeless Fireplace

AN EXPERIENCE WITH A CHIMNEY THAT WOULD NOT DRAW AND A FLUE THAT WAS TOO SMALL—HOW THE DEFECTS WERE REMEDIED—HINTS ON HOW TO BUILD A FIRE

IF there is a moment in the experience of the builder of a home that is fraught with greater tragedy than the moment in which he faces the realization that the fireplace will not draw, I do not know when it is. Many kinds of despair and rage consume him at different times as the different little difficulties which await him are met, but the fireplace that emits only smoke is the crowning calamity. I know, because I have suffered them all—and suffered this, too, at the end.

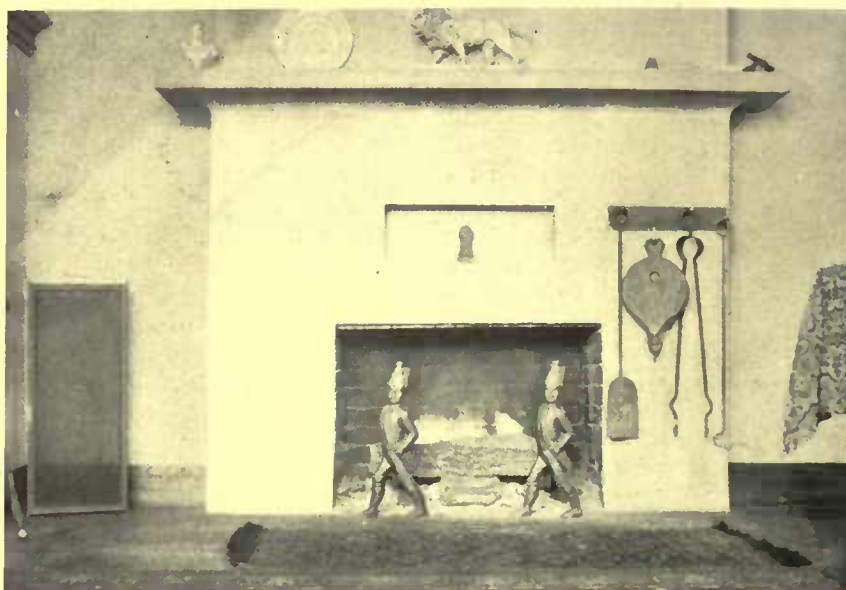
All of our sentiment about home centered in the fireplace; most people's does. We had always felt ourselves before it, watching the glowing, crackling logs while we heard the sweep of winds outside and the beating of an icy branch against the pane, and saw through the casement the drifting, scudding snow. Never was there greater joy of anticipation!

So the lighting of the first fire on this home altar became an event—a ceremony—and we approached it accordingly. We placed the backlog as it should lie, then the smaller forestick that goes at the front of the andirons; and then we laid the kindling, remembering to start with the two mystical crossed sticks, for their ancient symbolic meaning. The hickory was just right, dry enough to burn and green enough to last, so the torch (really it was a safety match, but we called it a torch) was applied with keen enthusiasm.

Then—my goodness! Did human beings ever before or since succeed in lighting such a smudge, I wonder? Doors and windows had to be thrown wide, and we finally had to carry that wretched fire bodily outdoors, stick by stick, and dump it into the snow.

Then we sneaked upstairs to scrub off the soot, nurse scorched fingers, go to bed to get warm and be alone to curse the mason and the contractor and the architect, not alone of this house but of all houses; individually, collectively and universally!

Of course we went to studying about fireplaces after this, but so far as we were able to find out, there was nothing for ours but to tear the chimney down and build it all over. And as this was very much the same as tearing down the house, owing to the chimney's location, we did nothing and tried to ignore the fireplace.



With the new throat and smoke chamber the fire burns perfectly and the new finish of the mantel was found more satisfactory than the former one

BY E. O. CALVENE

Photographs by the author

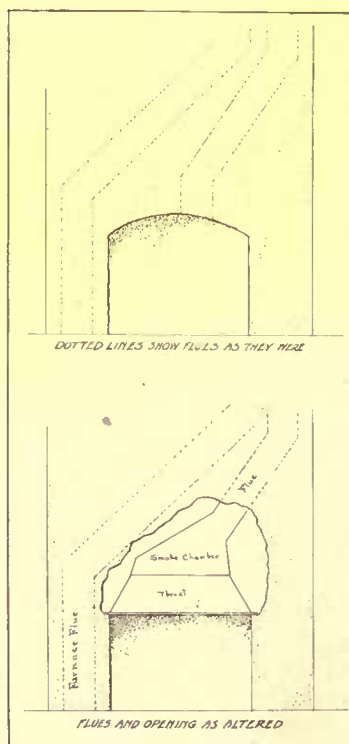
ing else will answer when it comes to balky fireplaces; there is not a particle of use in trying to botch one up unless the flue is all right, and all efforts in this direction are time and money wasted. If your fireplace smokes, look at the flue first of all.

Compute the flue area and the fireplace opening area, for purposes of comparison. The area of the former should be from one-tenth to one-twelfth of the area of the latter, according to the very best fireplace experts, never less than one-twelfth. If the flue, for instance, is 8 x 8 inches across, its area is 64 inches.

This will carry a fireplace opening having an area of 768 square inches. Very well. Now, as a pleasing proportion is usually insured by making the opening about two-thirds as high as it is wide, a little figuring will develop for this area, 23 inches for the height with 33 inches for the width, ignoring the fractions. No larger opening should be attempted.

But our fireplace was 26 inches high and 36 inches wide, with an arching top, as the drawing shows. With a flue 8 x 8 inches, this gave us a flue area of about one-fifteenth the fireplace opening! No wonder the smoke could not get up the chimney. And added to this we found that our flue was away over at the side instead of being in the center, that there was no throat whatsoever, and no smoke shelf, consequently no smoke chamber. It was, in short, nothing but a crooked, bent opening, up through to the sky, starting in 8 inches square right at the top of the fireplace. I never would have believed that any mason could or would have done such a thing if it had not

(Continued on page 398)



The small, misplaced flue was cut short and attached to an iron smoke chamber and throat



The building lot, 258 ft. wide by 178 ft. deep, is partly on the crest of a hill and partly on its steep slope. Into this the cottage was fitted to make it seem part of the landscape and at the same time take advantage of the best views

The Making of a Distinctive Home

THE HOUSE AND GARDEN WHICH ITS OWNER PLANNED TO FIT HIS PERSONAL IDEA OF COMFORT AND LUXURY—A SIMPLE AND SINCERE COTTAGE WONDERFULLY ADAPTED TO AN IRREGULAR SITE

BY LOUISE SHRIMPTON

Photographs by George E. Doust and the author

ON a hill-top site overlooking Syracuse, N. Y., William Henry Peters has located the house and garden of his own designing. They are a practical refutation of the theory that the American business man is narrow minded, with no interests other than commercial ones. His cottage is planned with the utmost care as a fitting home for the family that lives in it. Every advantage of site has been utilized in the placing of living rooms and garden features. A rule of simplicity is everywhere adhered to. In the furniture, designed specially for the places it occupies, the owner has adequately completed his scheme.

The building lot, two hundred and fifty-eight feet wide by three hundred and seventy feet deep, is partly on the crest of the hill, partly on its steep slope. At the foot of the slope is a large pond belonging to a city park. At present the steep hill-side is planted to

alfalfa, and is not shown in our garden plan. The width of the lot and its sharp descent at the rear prevent any future interference with the view of the blue hills that stretch far into the distance and skirt half the horizon. In planning the cottage, the site has had due influence, since the principal rooms face the hills at the east, while the kitchen is on the street front. The distribution of ground floor space is also a feature of the plan. In a successful small house plan there must necessarily be sacrifice and selection. To copy the large house or mansion type results in a series of box-like compartments, no one of them large enough for a family assembly room. The living room in this cottage fills a large proportion of ground floor space. The dining room is distinctly small, and the studio is also small, though both rooms have glass doors opening upon the terrace, extending their apparent size. The kitchen is furnished with built-in cupboards that make a butler's pantry useless.



The garden furniture is of unfinished pine already weather stained



Each article fits into the general scheme simply but appropriately



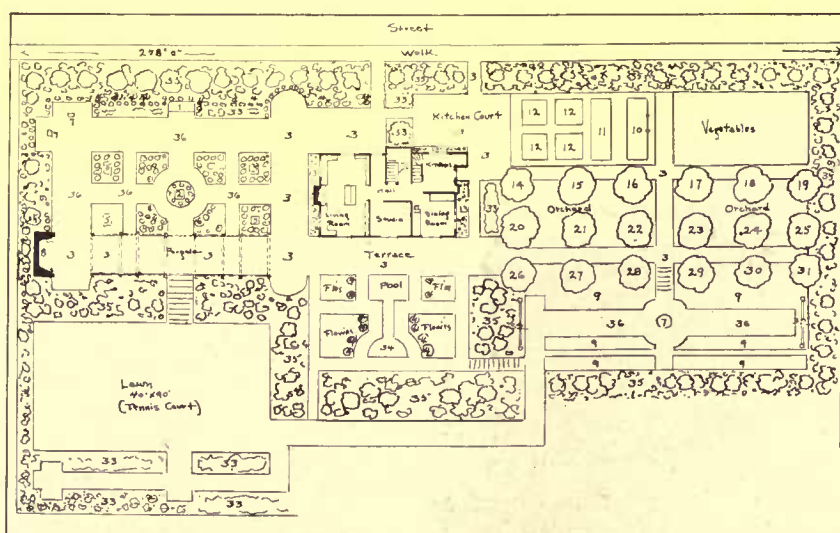
The living-room fireplace, flanked by spacious built-in-seats, is constructed of the exterior brick, varying in tone from a bright red to a dark, bluish gray, put together with ordinary gray mortar

Through this deliberate curtailment of other rooms, the living room is spacious, plenty of room for a big table and desk, for a large fireplace with inviting seats built around it and a settle in front, for the foreign books and prints that line the walls. In spite of its size, seventeen by twenty-six feet, it is a homelike place of cottage type, low ceiled and comfortable, the long horizontal lines of casement windows helping this effect, while additional light and air are given by glass doors at either end.

On the second floor the owner's suite consists of a large dressing room and a smaller sleeping room, furnished with windows that make it practically an upper porch. Nursery, guest room, sewing room and bathroom complete the plan, and servants' rooms are finished in attic space.

Sincerity and a feeling for beauty in the choice and use of materials are marked characteristics of the construction. In building chimneys, garden walks and terrace, hard fired

brick was used. In the living room fireplace there is no veneer of different material toned to the manufacturer's ideal of lifeless uniformity, but the exterior brick, varying in tone from a bright red to a dark bluish grey, is frankly used with excellent effect, put together with ordinary gray mortar. The roofing slate is unusually varied in color, ranging from pale gray into orange tones, the variation caused by the oxidation of the iron in the composition. Though perfectly durable, this slate lacks monotony and is inexpensive. Chosen partly because of its cost,



The plan of house and grounds

- 1, Bench; 2, sun-dial; 3, brick pavement; 4, arbor vitae; 5, climbing rose; 6, standard rose; 7, pedestal ornament; 8, summer house; 9, small fruits; 10, coldframes; 11, hotbed; 12, seed beds; 13, hollyhock; 14, cherry; 15-18, Northern spy apple; 19, chestnut; 20, Bartlett pear; 21, Clapp's pear; 22, champion peach; 23, Crawford late peach; 24, Crawford early peach; 25, plum; 26, red Astrachan apple; 27, Pumpkin sweet apple; 28, Baldwin apple; 29, McIntosh apple; 30, mother apple; 31, butternut; 32, grape arbor; 33, flowers; 34, lilies; 35, hardy shrubs; 36, grass.



The crest of the hill was extended out and upon this a terrace of fired brick, showing a fine color effect, was built



At the foot of the lot there is a pond, beyond which the distant hills are seen framed in the lines of tall hollyhocks

it proves uncommonly successful from the standpoint of beauty of color.

In both exterior and interior woodwork is the same sincere use of material, selected not because it happens to be popular, but because it is suitable for a cottage; unpretentious, but with marked beauty of grain and texture. Cypress clapboards treated with oil were used for the exterior walls. For interior woodwork hard pine was used throughout, stained a light brown that shows tawny and greenish tones. Paraffin oil is used for cleaning, but this has been the only finish, no shellac or wax having been applied. In design, the woodwork has straight lines, flat surfaces that are easy to dust, and no mouldings. No stock windows or doors were used, but all were built after special designs and their proportions and paneling add much to the effect of the interior. In our photograph of the dressing room the doors show the simple lines of the woodwork and its beauty

of grain. The staircase has heavy newel posts reaching to the ceiling, suggesting modern English woodwork. The floors throughout the cottage are of comb-grained pine, stained a dark brown and finished with paraffin oil.

The ceilings are of ordinary light construction lathed and plastered. There are no picture rails. The low ceiled walls, seven and a half feet high on the ground floor, and seven feet on the second floor, are finished in a float coat, without the final smooth coat beloved of the plasterer, which often cracks and peels off within a few months' time. No wall paper was used. In the living room and hall, the walls are left in the uncolored gray plaster, the color echoed in the monk's cloth portières and silk window curtains. In the dining room the walls are painted in oil-color in a deep



At the edge of the terrace, which is really an outdoor living-room, furnished with garden chairs, is the garden pool

Prussian blue. In one or two other rooms a pale water-color paint much diluted was put upon the walls.

A distinctive feature is the furniture, built-in and movable.



This buffet of quartered oak is only thirty inches high, but long and narrow, and contains a series of cupboards



The simple chiffoniers, in harmony with the trim and designed to fill the wall space, have no ornament but tiny brass knobs

Nearly all the pieces were built by hand after the owner's designs, to occupy a wall or to fill a floor space and, incidentally, to emphasize the quaint and livable quality of the cottage. This method of furnishing, not expensive in the case of built-in pieces such as bookcases or seats that do away with heavy movables, insures a certain harmony between an interior and its fittings, to be gained in no other way. Also pieces can be built to suit and fit their owners, obviating frantic search through shops for an unobtainable ideal.

Among the built-in pieces are the broad settles on each side of the living room fireplace. Their high backs, of broad planks, form a wainscot for the greater part of the room. A built-in desk of very simple make, and simple book shelves, are other living room features. In the nursery and sleeping rooms are broad cushioned window seats with box space beneath. The dining room buffet and serving table are of unique design. The accepted conventions are definitely abandoned, and the buffet instead of being thirty-six inches high, with high back and plate rail, is thirty inches high, with no plate rail or back, a long narrow piece with heavy posts and containing a series of cupboards. On the top is a delightful row of brass and copper utensils collected in Italy. The serving table, not so long as the buffet, is of the same height and contains drawers for table silver as well as linen cupboards. Quartered oak is used in their construction. The round table and leather bottomed chairs are also of oak, stained a slightly darker tone



The rear of the cottage is really the garden front. At the left is a formal arrangement of rose beds, with a sun-dial in the center; beyond, at the right, is the orchard



Another view of the terrace front of the cottage, with the brick steps, which lead from the pergola to a lawn and tennis court several feet below. These steps are another example of the artistic value of bricks irregularly laid and of different color

than the wood-work. In the dressing room illustration are shown two chiffoniers designed to fill a wall space. They are of a pattern as simple as possible with no vagaries of line, and tiny brass knobs are their only ornament. An armchair, a desk, dressing table and other chairs in this room are also built specially for their places, as are some of the bedsteads and other furniture in the sleeping rooms.

The cottage is protected from the road by a hedge formed of small trees and shrubs planted in a wide border. There are wild plum trees, their purple colored foliage contrasting with the green around them; Lombardy poplars, sumac, which will be cut out later, as its semi-tropical appearance is not liked, but which gives quick results in the way of shade; syringa and wild currant, and a row of little arbor vitae trees outlining the inner edge of the border. In the three years that cottage and garden have been in existence, the growth of this hedge has made it a thick, high barrier. It has an informal look, and violates none of the prejudices of the passer-by who resents high walls or unbroken hedges. There is no gate, but a narrow brick pathway leads to the sidewalk without.

At one side of the cottage is the rose garden, a formal arrangement of beds, with a sun-dial in the center. Tree roses form a circle around the dial. The grafts are tea-roses on ordinary stock. Climbing roses fill the centers of the beds. The location is a perfect one for a rose garden, the delicate tints of the tea-

(Continued on page 398)

When and How to Do Winter Spraying

THE VARIOUS PESTS WHICH ATTACK TREES AND SHRUBS
AND HOW THEY MAY BEST BE REACHED DURING THE WIN-
TER—WHAT PREVENTIVES ARE MOST SUCCESSFULLY USED

BY F. F. ROCKWELL

TIME was—according to those wonderful tales which one may always hear where a knot of the oldest inhabitants gathers at the blacksmith shop to watch the repairing of some part of the spraying outfit—when perfect apples loaded down the healthy and unmolested trees, and spraying was undreamed of.

That day, if in fact it ever really was, has passed. I believe, however, that authentic history would support the remark of J. H. Hale, the "peach king," made at a meeting of fruit growers. Several had complained at length of the ravages of the San José scale; as a veteran grower they looked to him for a few remarks. Jumping to his feet he exclaimed, "Why the scale is the best friend you ever had. It has compelled you to take proper care of your trees, which you never would have done without it!"

Mr. Hale was one of the first to give his trees real care. He not only kept them clean, but through cultivation he gave them moisture and air, and he fed them—he orders their food-stuffs, straight chemicals, by the hundreds of tons. In spite of Brown-rot scale, Black-spot, Yellows, and all the other new-fangled insects and diseases, his peach orchards have transformed barren New England hilltops into

green acres of productive fruit trees.

It is true that the armies of the minute enemies have invaded fruit growing as well as the other field of agriculture, but in none can they be more thoroughly fought off, or has their history been so carefully studied.

The habits of the several insects attacking fruit trees naturally vary greatly. Some of them may be got at only while they are active, in the summer time, as they spend their winters in quarters inaccessible to the orchardist. Others, on the other hand, are careless enough to leave themselves exposed; and this gives the fruit grower an exceptionally good opportunity to exterminate them, for three plain reasons. First, as the trees are dormant, much stronger remedies may be applied; secondly, as no leaves or fruit are in the way the job can be done more thoroughly; and in the third place, as the enemy is not active, it is easy to get him. Moreover, there is usually more time for the work than is found in the busy summer season, and consequently is not so likely to be skipped. But it must be borne in mind that winter spraying is a supplement to, not a substitute for, summer spraying.

The *San José scale*, illustrated in its active state on this page, is the most serious of the pests we can fight in winter. To the

inexperienced, the amount of injury which this small creature can do to a strapping big full grown tree, seems incredulous. But one who has witnessed the astonishing improvement, both in quality of fruit and amount of new growth, resulting from a single season's thorough spraying, needs no further proof that they must work serious havoc. The San José scale is about the size and shape of a small pin head, with a diminutive "crater" at its center. As every female scale bears several hundred young—there are sometimes four broods during a season—and as they are born living, one may imagine at what rate they increase. However, cold weather kills off all but those at a certain stage of development—black and half-grown—which live through the winter safely. Where they get a chance to multiply unchecked they form plainly discernible colonies or crusts on the branches, and on the fruits conspicuous small red spots.

For San José, spray in fall or spring, with any of the winter sprays. In bad cases, at both times.

Oyster Shell Scale. This is sometimes taken for the above, as it colonizes and encrusts small apple twigs, and larger limbs. It is really a bark-louse, the eggs of which are protected during the winter by the old scales, which are something the shape of an oyster shell, but only the fraction of an inch long. Beside winter spraying, they may be reached, just after they hatch, in late May or June, by spraying with 10 per cent. kerosene emulsion or whale-oil soap, 1 pound to 4 gallons. This scale is not nearly so injurious as the San José, but undoubtedly retards growth.

Blister Mite. This minute destroyer makes himself known by raising small brownish spots or blisters on the leaves of apple or pear trees. Spray in winter or early spring, with kerosene emulsion diluted five times, or miscible oil.

Leaf-curl of the peach, which causes the leaves to become twisted and distorted in spring and to fall in early summer, may also be controlled by winter spraying. Give one application, before the buds swell, using Bordeaux (5-5-50) or lime sulphur.

Besides directly combating the disease being fought, the winter spraying undoubtedly serves a second purpose in keeping the trees clean of other insects and eggs.

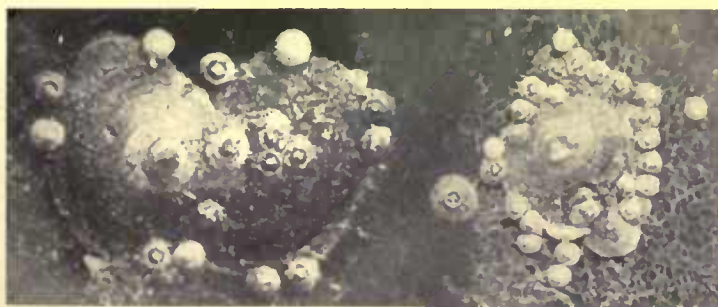
In winter spraying lime-sulphur wash and miscible oils are the two preparations universally used. The lime-sulphur became the more famous, but of late it has, if anything, been losing ground in favor of the oils.



Every inch of bark must be reached



Tall trees will need a power sprayer



The little red spots of San José scale have this appearance when greatly enlarged. Ordinarily they are the size of a pin head

The lime-sulphur wash may be obtained in three ways: (1) home boiling, in which the ingredients, in the proportions of

Lump lime	4 lbs.
Flower of sulphur	3 lbs.
Water	5 gals.

are boiled hard for an hour, kept well stirred, in an iron kettle. After boiling add water at the rate of 5 gals., preferably hot, and use if possible before cooling. (2) Self-boiling: While the self-boiled lime-sulphur is very slightly less effective than the fire-boiled, it is so much less trouble to prepare that for use on a small scale, it is preferred. It is prepared so easily that there is no excuse for the owner of a single tree to let it go unprotected. It takes, for a supply for two or three dozen trees,

Lump lime	8 lbs.
Flower of sulphur	8 lbs.
Water	50 gals.

Slack the lime in a little warm water; when it is going freely, sift in the sulphur and keep it stirred thoroughly until a thick paste is formed. From the time of putting in the sulphur the mixture self-boils for fifteen minutes, preferably covered. Then cool down with the rest of the 50 gallons of water, and use as soon as possible. A smaller amount may be made, keeping the same proportions. Some advise the addition of a little common soda-lye—such as is sold in grocery stores—to the mixture, say one pound to eight of the lime, adding it after the sulphur is put in.

(3) The "factory-boiled" or commercial brands of lime-sulphur are the easiest to handle and prepare. They are ready for use as soon as diluted with water, warm water being preferable if it may be had.

The miscible oils are the most convenient of all winter sprays to prepare and apply. They are put out under several trade names, and have been proven effective. Dilution with water is the only preparation needed, one gallon of the oil making ten to twelve of spray. They have the advantage over lime-sulphur, for work near buildings that they will not spot painted workwork, or make the trees conspicuous. They also do not stick-up and corrode the sprayers and nozzles as badly as lime-sulphur.

Oil emulsions may be made at home quite readily. The standard formula is as follows:

Crude oil or kerosene	2 gals.
Water (soft)	1 gal.
Soap (preferably fish oil)	1/2 lbs.

Boil the water and add the soap, s h a v e d . Dissolve thoroughly, remove from the fire, and add the oil, and churn rapidly with a pump for five minutes or so, until a milky consistency is obtained, and the oil and water will not separate. For use, dilute with five to seven parts water. Where the strength of an emulsion is expressed by, say a 10 per cent. kerosene emulsion, it means

that there would be two gallons of kerosene in ten of the mixture as diluted, ready for applying.

As will be seen from the foregoing, there is quite a choice as to the sprays available. There is, however, no choice in the matter of applying them *thoroughly*. Only by covering every square inch of bark exposed may efficiency be hoped for. This is where the miscible oils have another advantage over the lime-sulphur wash; they spread more and work into the crevices in the bark.

Before the perfecting of modern spraying apparatus, the thorough and economical application of spray materials was a problem, especially for the man who could not afford extensive apparatus. It is now a simple matter. Modern nozzles give the spray that degree of fineness which is so essential to thorough work. And for use in the home orchard the compressed air sprayer furnishes a steady, conveniently regulated pressure.

For commercial orchards, use is made of a power spraying apparatus, usually driven by gasoline and conveniently arranged lines of spray hose and nozzles, handled by poles, which enable the operators to cover the trees very readily. For the home orchard a barrel-pump like that illustrated below, or one of the several good types of knap-sack or air-tank sprayers, like that illustrated on this page, does a world of good with mighty little effort. There is no reason why home grown fruit should not compare very favorably with the best seen in good markets at such pay-envelope wrecking prices.

The little hand sprayers of the syringe type may do for rose bushes and plants; but if you have two or three fruit trees get a good brass air-tank pump. It will be useful for many things beside your winter spraying; not a month in the year but it will pay good dividends. An important feature to watch is to see that the hose is securely fastened to the tank; on most small pumps this is the weakest point. I once got a full charge of kerosene emulsion and Paris green square in my mouth, nose and eyes by having a pump give way at this point, and since then have been rather careful.

The nozzle is another important factor. It should throw a perfectly fine, even spray, should be as nearly as possible "clog" proof, and should be under easy control. One simple kind has the advantage of having a "goose neck," so that a simple turn of the wrist at the end of the nozzle pole will throw the spray in any direction desired, and thus takes the place of a great deal of inconvenient maneuvering on the part of the operator, in order to cover both sides of limbs, etc. This advantage is still more noticeable on a windy day; with the old type of nozzle throwing the spray straight ahead, it was frequently necessary, in order to do a good job, to go over the tree twice, when the wind happened to be unfavorable. The goose-neck overcomes all this by turning the spray at best point.

(Continued on page 400)



For the home orchard a barrel pump connected with lines of hose makes an efficient sprayer



The handy little compressed air sprayer is easily manipulated and furnishes a steady pressure



The main entrance to the house is through the quadrangle, in which the marble-trimmed arch marks the doorway to the main hall

Homes That Architects Have Built for Themselves

THE LONG ISLAND HOME OF MR. THOMAS HASTINGS AT WESTBURY

BY HENRY H. SAYLOR

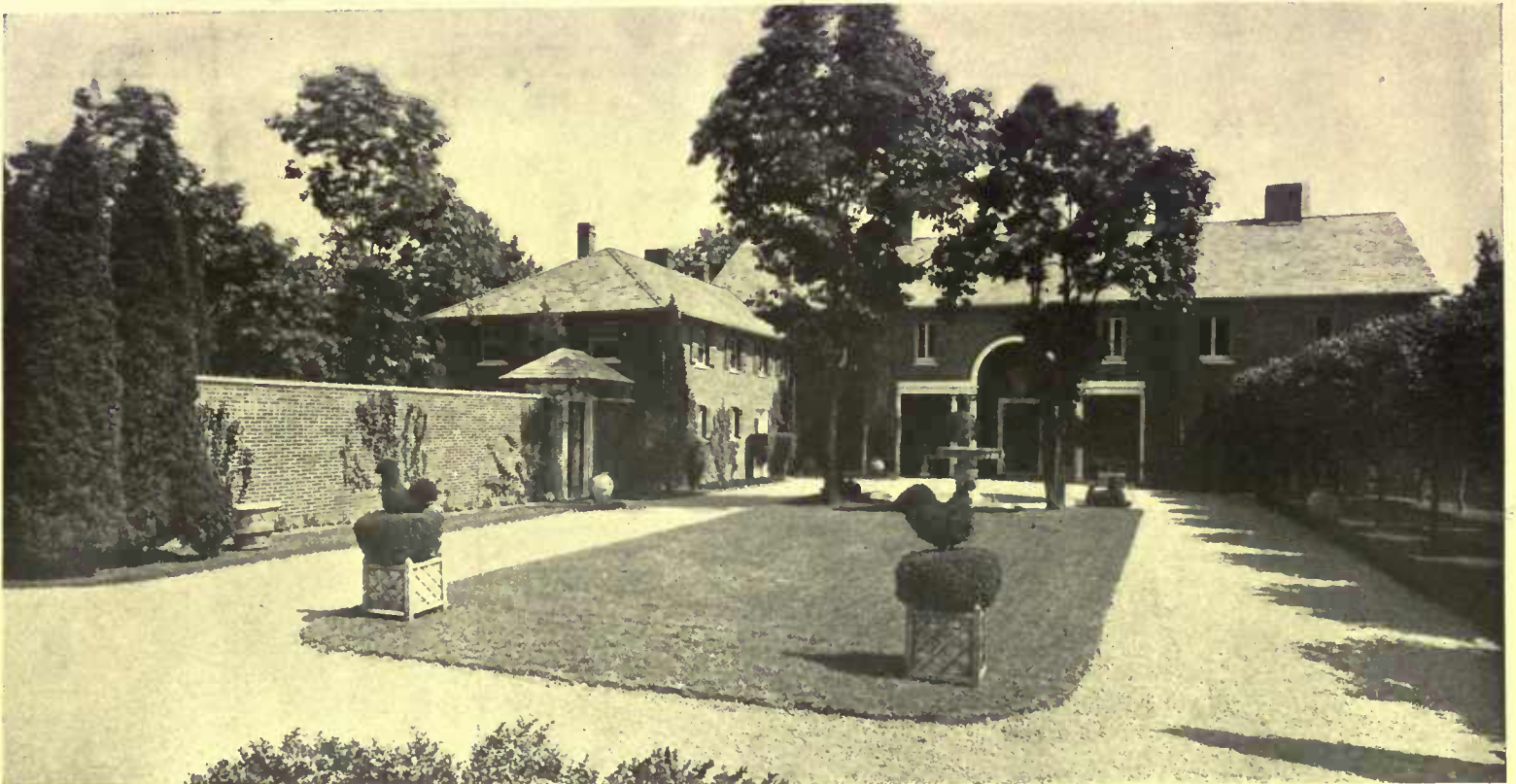
Photographs by Robert W. Tebbs

HERE is a fact that seems not to be very widely recognized in connection with building a home. It is that the most successful home as a general rule, is the one built as an expression of one dominating idea. When a man says something in a clear, concise way—making a definite statement regarding one fact—there is no chance of his being misunderstood. It is only when he tries to tell you several things at one time that none of these makes a pronounced



The paneled dining-room is at one side of the terrace front, with a porch at its end. On the other side is the living-room symmetrical with it

impression upon your mind. It is precisely the same in architecture. If a man tries to put together in a harmonious whole a number of schemes that he has observed successfully incorporated in as many houses belonging to other people, the result is sure to be a disappointing hodge-podge. If, on the other hand, he does as Mr. Thomas Hastings did in designing his own home, the chances of success are all in his favor.



The four box-stalls for the thoroughbreds have their doors and windows opening upon this view over the court. The service wing of the house is at the left, partly enclosing the quadrangle

Mr. Hastings wanted to live where the center of interest is the thoroughbred horse. Here live many of the friends of Mrs. Hastings and himself—horsemen and horsewomen all, enjoying the broadest sort of country life, in which the saddlehorse plays the leading part. The Westbury colonists do have 30 horsepower mounts too—with the accent always on the horse, for one of the really scarce things in that part of the country is a carriage.

The dominating idea, then, in Mr. Hastings' own home was that he was living in a place where the main interest of everyday life was the horse, and all that has to do with him—following the hounds or riding cross country. To those who know him, the thoroughbred horse is a very lovable animal. Mr. Hastings knew this so well that he wanted to live in the same house, with his mounts. A glance at the plan will show how clearly he has expressed this in his design. House and stable are at opposite ends of a moderate-sized court that is enclosed on one of the longer sides by the service wing and a brick wall, on the other side by a pergola. Both buildings are built of the same materials on the outside—a rough-textured brick, which, on the house, is brightened by a restrained use of white marble. The four large box-stalls look out upon the court, whose broad graveled paths are made for the use of the four-footed members of the family as well as for those who come from out the Palla-

dian entrance at the opposite end across the plot of smooth lawn.

The site of the group is one that closely approaches the ideal. Half in and half out of a patch of woods on the slope of a hill, the stable end is given a background of green as a setting for its splendidly simple roof lines, while the outside rooms of the house

look out over a terrace down to the pasture for the thoroughbreds in the valley. A really magnificent conception, is it not?—and one that expresses, as clearly as architecture can, the thought—"Love me, love my horse."

When one examines the group more in detail there are several particularly interesting things to notice. One is the fact that Mr. Hastings has built his home as well as it could be built, of enduring materials—the only wood exposed to the weather is that in the window sashes. He has so disposed the openings that there are broad masses of brickwork to support the vines that are already well started. Under the terrace there is a place for wintering the bay trees, aquatics and other potted plants of the kind. A garage is found in a secondary position in the stable group and under it there is a low stable.

It is a pleasure to notice that Mr. Hastings has not followed the beaten path as regards his vegetable garden, relegating it to some out-of-the-way corner as a necessary evil. He has, on the other hand, given it a place bordering the entrance driveway, edging it with lindens which he purposes clip-

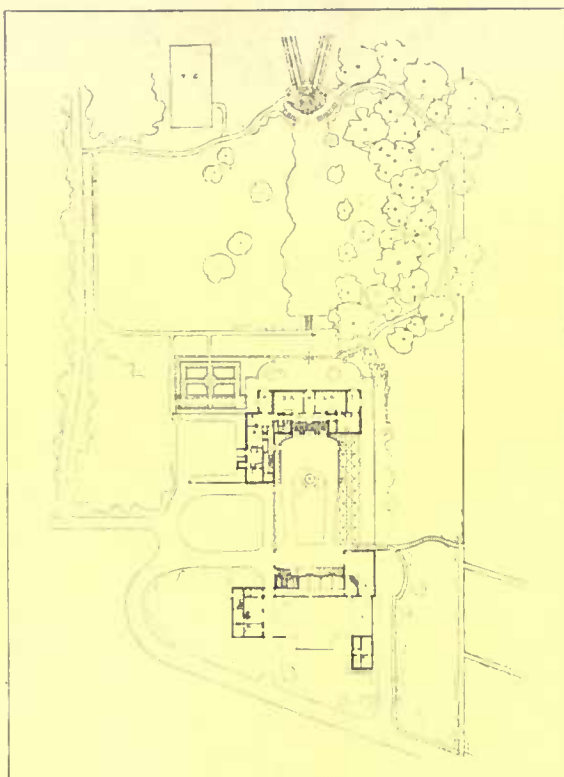


In the entrance gates Mr. Hastings has given a freer rein to his fancy for color, using terra cotta with the brickwork

ping back. The screen reveals glimpses of the growing vegetables as one drives in, without giving an uninterrupted view over them all the way.

It is particularly interesting, too, to look into the matter of the building's architectural style. Probably many visitors to the Hastings' home will be surprised to find so simple a structure sheltering the man who designed such buildings as the New York Public Library and the New Theater. The one thing above all others that Mr. Hastings strove to avoid was an appearance of "too much architecture," as he phrased it. And in this connection I remember how vigorously the late Mr. John M. Carrère, Mr. Hastings' partner, spoke of his own difficulties several years ago along this same line. As he put it, his repeated admonition to his draughtsmen working out the details of his Westchester county home was, "cut out the architecture!" Simplicity and restraint in design are the most difficult things to accomplish, just as they are the two most important factors in the successful result. house, if there is any such thing. First.

Mr. Hastings' house, in architectural style, may be said to be an Italian farm-last and all the time, however, it is a Long Island country home for the owner's family, never forgetting the thoroughbreds. And, above all, it is not a finished product. Mr. Hastings says most truly that when designing a country home he tries to picture what it may be made ten years, or



The stable group is at the lower end of the plan, forming one end of the quadrangle

fifty, from its completion. For if it cannot be constantly improved, rounded out in detail, made more lovely each year of its life, it is not a good house. Moreover, if within the owner's lifetime it can be called *finished*, that man has lost his grip on the most vital thing in country living. In constant improvement, refinement and making more lovely the house and its setting, lies the very essence of joy in the country home.

In this feature I think Mr. Hastings has expounded a truth that should be well to emphasize. The trouble with our American homes is that they show too much evidence of the "home built while you wait" appearance. The house, its ready made garden—bought in its entirety rather than through selection—all must be complete at a certain time. Then the tired owner bids farewell to the tired architect with a short "that's finished." Yes, it is finished, perhaps, but there is no room to spread, nothing to grow into, and that feature which we admire so much in English homes is entirely lacking. If we were not so anxious to end our house in a season

we would open up the possibilities of perfection through progress; we would have for our own the enviable enjoyment of a new work to be undertaken as we advanced to the various stages of new requirements to be met and new desires developed. In this way Mr. Hastings has been wise and long-sighted.



The same rough-textured brick is used in the stable walls, and the inside of this building is as well kept as the house at the opposite end of the court

Beautifying the Bathroom

WHILE SANITATION IN THE BATHROOM HAS REACHED GREAT DEVELOPMENT THE DECORATION IS OFTEN NEGLECTED—WALL PAPERS AND RUGS WHICH MAY ADD TO THE BATHROOM'S ATTRACTIVENESS

IT seems curious that the smallest room in a house is receiving the most attention. The bathroom is as important as the parlor. It has been the subject of so much careful consideration during the past decade that it now has almost perfect sanitation. Stringent legislation has wrested the subject from individual discretion. Equipments have changed, improved and multiplied.

With all this evolution and revolution the absorbing idea has been sanitation. Everything has been sacrificed for this object. Now that the goal has been won, attention is being turned to decoration. While conforming to every law of health, the place should be made as attractive in its way as any other room in the house. Bathing even indoors in a little room may be more truly refreshing if the surroundings are right. The environment should be psychologically correct. How delightfully this is being accomplished it is pleasant to observe.

For purposes of classification bathrooms may be considered as of two kinds. First the hospital type, a favorite style. And second the familiar home type, idealized. Opinions are divided as to which is the more desirable. The choice of types is a matter of personal preference when building. It frequently happens, however, that one must adapt the sort one finds already installed to the style one prefers. Fortunately there are always latent possibilities. How to make the most of these depends upon the knowledge of working materials and how to use them to obtain best results. For the present article we will confine ourselves to making rooms attractive and leave the matter of novel equipments and luxuries to be considered on a later occasion.

Before going into details of decoration we pause to make one suggestion by way of preface. Keep the bathroom what the name signifies. Let it be a lavatory only. Eliminate the toilette. Put that in a separate room even if it be tiny. This may mean taking space from the bathroom itself, but the convenience of both rooms will be more than doubled.

With this hint as to arrangement we may take up the two styles



The turtle and trident is attractive as a corner piece or at intervals in a frieze

BY LYDIA LEBARON WALKER

Photographs by the author and others

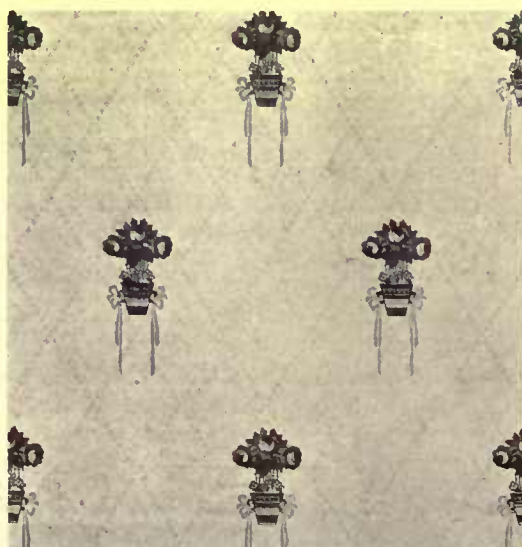
of rooms as above classified. Regarding the first or "hospital" type, we may say the term is used here in an appreciative and special sense. So immaculate is everything in such a room that one instinctively feels as if everything, floor, walls, ceiling, accessories and even the air, had been sterilized. One is confronted with highly glazed tilings. The whole scheme is as a crystal to a diamond. It has all the clarity and purity—without the glow and color. But it is the option of the housewife to add certain decorative elements.

Suppose, instead of having white tiles only, some tinted ones were introduced in the tiled floor, in the lower third of the wall or in some simple frieze effect. Use this same tone as the keynote for the color scheme of the entire decoration. Choose a washable rug that has this hue dominant. Bring the color into prominence again in the linen. Select towels with borders of the color. Or if white linen only is desired, have monograms and embroideries worked in the right shade. Thus the monotony is relieved by the color introduced.

Where the tiles are unglazed, or walls are painted, stenciling makes an excellent ornamentation. The designs illustrated are unique and especially appropriate. They have the right spirit. Conventionalized fishes, waves and seaweed form the theme for the frieze section, while turtle and trident are strikingly brought into relief in a separate motif. These designs may be used alone or in combination. The turtles and tridents make attractive corner pieces. They may also be introduced occasionally at regular intervals between repeats of the frieze.

Another good use for these stencil designs is to apply them to bathroom rugs. Any suitable material that will wash, preferably white, may form the basis of such rugs. The design may be used as an entire border or to decorate the ends only.

While these stencil rugs are unique and can be made at home, yet the rush of modern life leaves most of us little time, and we avail ourselves of factory products. This season shows some admirable designs. For example, one rug illustrated has for its



Wall papers may be washable and sanitary without the sacrifice of beauty. At the left is the kingfisher design and at the right the sea gulls above the ocean; the central paper combines a conventionalized design with the suggestion of tiling

border some real or imaginary monsters of the deep which are of genuine decorative value. This rug is of wool, soft and warm to the feet; it is washable and is guaranteed as to color. These woolen rugs, by the way, are a very recent innovation.

In turning from the first type of bathroom to the second or home style, we find it lends itself to more varied treatment. This is largely due to the fact that the walls are papered instead of tiled or painted. The range of bathroom papers is wide. They are



Sanitation does not necessarily preclude decoration. A little color and design might be introduced on these walls, the tiles or in the rugs

Whether the theme be the sea or no, out-of-door papers are the latest vogue. The tide is turning from severity of design as seen in the ordinary tiled effect. The newest papers bring either a smell of the sea or a breath of the garden.

The most decided innovation is the flowered papers. They are some of the surprises Dame Fashion springs on us just as we have fallen into a rut. She refuses to allow us to become conservative. Our ideas may be getting a wrench, but it is toward beauty.



A new wool rug which is washable and somewhat warmer than the old kind comes in various designs



The Greek scroll makes one of the most serviceable patterns for the various styles of cotton bath rugs

washable and sanitary without any sacrifice of beauty. It is useful to know, however, that one or two coats of varnish make any paper waterproof. The regular bathroom papers are apt to possess the more appropriate designs. Some of the artistic conceptions are nothing short of beautiful.

Take, for example, the kingfisher paper. The background is a realistic lake surface dotted with pond lillies which are reflected upon its waters. Kingfishers are alight on curving stems. Other kingfishers are on the wing, while occasional dragon flies skim the surface. Though the color of this paper is blue, there is the feel of sunshine. Skies are bright and days are pleasant along the shores of this pictured lake. One wants a dip into the water and the tub is inviting.

In contrast to this lake another paper shows the ocean. Little white-caps fleck the waves while sea gulls flit about, their snowy wings reflecting the sunlight. One sees them skim the water, swoop down to catch some unwary fish, or soar far and high. The aesthetic harmony of a bathroom so papered is obvious. However small the room there is a suggestion of immensity.



Even the towels may echo the dominating color note in the decoration

England sends us some of the most fascinating papers for the coming season. One strikes a balance between tiles and flowers and might be termed a transition paper. The background is blocked out in tile effect. At regular intervals there are blossoming plants in decorative flower pots, the handles of which are ornamented with bows of ribbon. It has a quaint, old-world appearance.

There is a chintz paper shown in one of the advance fashions for 1912. The pronounced vogue of English chintz was dwelt on in a former article. Now it is invading even the bathroom. A curious trait of these chintz patterns is the apparent ease with which all sorts of flowers grow from one stem. Whether or no the English florists are experts in the art of grafting, one thing is sure, their designers are.

Other appropriate papers are those depicting Dutch life. There are lads and lassies, windmills, boats, light-houses, ducks, etc. The coloring is chiefly Delft blue.

The final touch of perfection in either of the two types of rooms mentioned is the introduction of growing ferns or other greenery to render the bathroom ideal.



Conventionalized fishes, waves and seaweed form the theme for various frieze patterns



It was the ideal of the chalet dwellers to make the interior trim and furnishings harmonize as nearly as possible with the keynote of the house. The living-room might have been transported from the Tyrol.

How We Furnished the Chalet

BY HELEN RAY

IN a recent number of *HOUSE & GARDEN*, a writer remarks that the quality of picturesqueness in the Breton farmhouse, or a Swiss chalet, is much a matter of architecture wedded to landscape. All will agree that the harmonious relationship of a building to its site is the first essential of success in the final whole. No less important is the fitness and relation of things within the house.

When the owners of "Felsengarten" (illustrated in the November, 1910, *HOUSE & GARDEN*) had finished building and the chalet seemed to "ride" very well with its stony hillside furnishing a truly Swiss approach, they found themselves up against it, as the boys say, to make "boughten" furniture cousin with Swiss architecture. The woman in the question brought her woman's wit to the problem, and then called in the carpenter. A bedstead of German solidity and of the uncompromising lines of the *Vaterland*, was the first evolution of the ingenious carpenter—shall we call him "wood worker," as being a more feeling title? When the bed was made up, with its heavy spread of old blue and white homespun and big Dutch pillows with crochet edged ruffles, it certainly looked the part.

A bureau, warranted to endure for aye, and designed upon the same massive lines, followed. Those who know, had

told us that the *sine qua non* in chalet work was massiveness bordering upon clumsiness, so each piece was made rugged and solid. All were built of heavy Oregon pine, stained a warm, walnut brown, not too much rubbed, so that all seemed part and parcel of the woodwork of the rooms. A few odd chairs, a mirror with quaint frame, a candle stand for the side of the bed, were fashioned from odds and ends of the lumber about the place.

The living-room and dining room combined made a fascinating "picture puzzle" in composing its properties. A big library table was built of heavy, two-inch lumber, with sprawling supports, into which the under shelf was let with wooden pegs; an open work clover-leaf was carved out of each end; the same open-work clover-leaf appears elsewhere in other pieces. A small-sized rag rug of dust color, into which were woven little green pine trees, served for a table spread and was well suited to the surroundings.

The look of the shiny upright piano of polished golden oak could not be tolerated for one instant, as being too American-ish altogether for the Swiss interior, and therefore a folding screen was created to conceal it. In the central one of the three panels, a colored oil print of Deffrigger's "Zither Player" was introduced, the outside panels being of beautifully grained Oregon pine stained a russet brown. Here again



Felsengarten, the California chalet, is built according to all the conventions of the Alpine chalet. Myron Hunt & Elmer Gray, architects.



It took considerable ingenuity to make the furniture coincide with the trim. The carpenter sawed out the chairs from Oregon pine; all were stained a rich brown

appears the clover-leaf design, and altogether it forms the central feature of the simple apartment.

A few concessions had to be made for the sake of comfort, and so a morris chair was



One of the most attractive pieces that were made was the screen with its colored panel

allowed for the head of the family to smoke his nightly pipe of peace in; but the cushions were made of such non-committal russet-brown burlaps that no one would look twice at them. Mother, too, was privileged to have an American rocker, but its quaint fiddle back and cushion of scarlet leather was what caught the eye and no one looked at the rockers.

The extension table in the dining room proved something of a problem to the carpenter, so the factory furniture supply was again levied upon, and a black oak table was chosen with heavy carved or twisted legs—on the score that the Swiss peasants spend long winter evenings carving



The bureau was of massive design and seemed part of the room's woodwork



A bedstead of great solidity and of the uncompromising lines of the Vaterland was the first evolution of the ingenious carpenter



The big library table was built of heavy two-inch lumber with sprawling supports held by wooden pins

and might easily choose to carve the legs of their tables! When chairs were set about it, it looked altogether very fit. A small side table held a copper percolator, a copper water pot, a brass *Brödchen* basket, and a

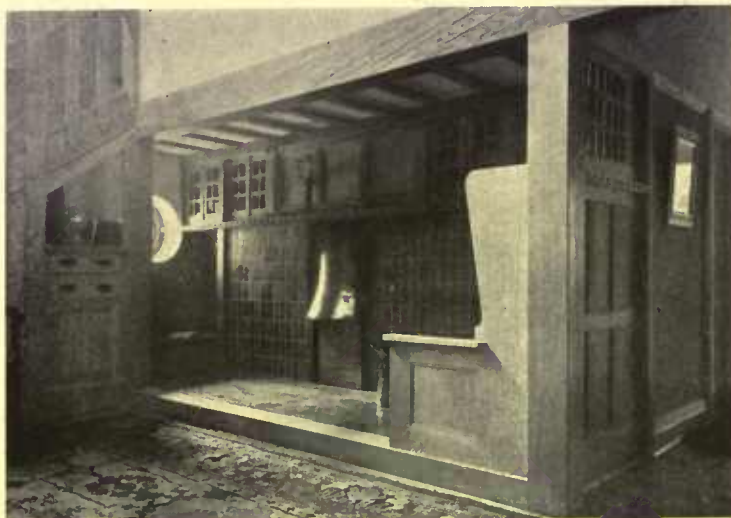


The desk was also hand made and bore the clover leaf common to most of the other pieces

German stein for sake of lending atmosphere.

Altogether it makes a retreat of refreshing departure from the stilted and over-adorned or Nouveau Art styles so much exploited.

What satisfied us so completely with our cottage was that we had chosen an appropriate type for the situation and made its interior consistent with its outside appearance. Our rugged site, with its garden of rocks, was certainly suggestive of Alpine scenery, and if the house was to be a *châlet* its furniture had to chime in. Then, too, we found that after all the pleasure of the furniture building, that it really was intensely practicable and long-lived and decidedly comfortable in use.



In England a great deal of attention is given to centering the family life about the hearth. This inglenook is almost an additional room



The raised hearth with flanking seats is characteristic of the inglenook and results in making the fireplace a distinctive feature



Even very simple fireside seats make an attractive corner by the hearth

A PAGE OF INGLENOOKS



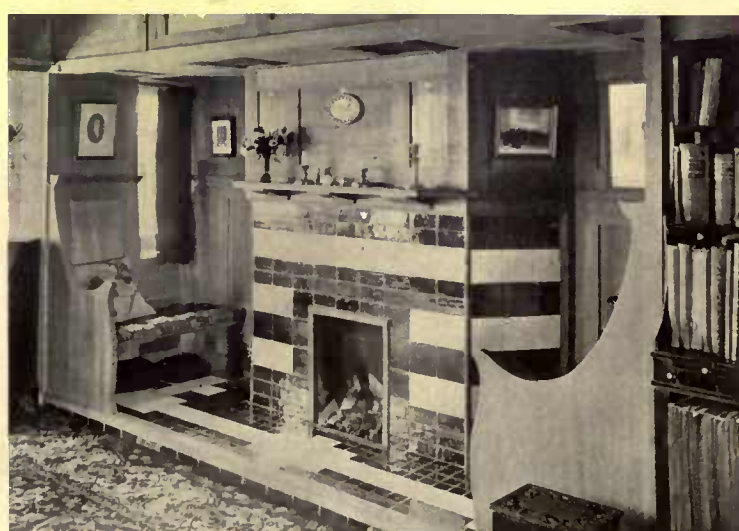
An interesting effect is obtained here in tiling the entire inglenook. The seats and mantel are all one



The large oak seats are really continuations of the wall paneling



The heavy beams make the disposition of an inglenook a simple matter. The grotesque figures are an interesting addition



The English architects seem disposed toward glazed tile fireplaces, which they make in interesting harmony with the woodwork

The Case for Steam Heating

A CORRECTION OF POPULAR FALLACIES IN REGARD TO THE STEAM SYSTEM—THE MODERN IMPROVEMENTS IN CONSTRUCTION WHICH HAVE RENDERED IT EASY TO REGULATE AND MORE ECONOMICAL

BY A. MASTERSON PLUMMER

Editor's Note.—"What heating system shall I use?" is the constant query of the home-builder. To assist in solving his difficulty, *HOUSE & GARDEN* has had experts in heating engineering present the advantages of their own favorite types of apparatus. For the first time the whole case of the best heating method will be presented to the public as a jury. The first article was on hot water heating, others will follow presenting the characteristics and advantages of hot air, and the indirect system.

THE relative desirability of the three methods of artificially warming the house is not determined by their relative first cost, nor is it wholly dependent upon the matter of expense of maintenance in fuel and repairs and efficiency in securing to all portions of the house that degree of temperature necessary to physical comfort during any and all conditions of weather.

In manufactories where a large number of operatives are employed; also in school rooms, cheap heating was at one time the desideratum, but it has been found, by the introduction of modern apparatus and methods of heating, that absence due to impairment of physical and mental vitality has been very considerably lessened; that in the former case the output has very materially decreased in cost and improved in quality, and in the latter case sluggishness of brain has been superseded by mental activity and greater progress in study. The effect upon the general health chargeable to the method of heating as noted above is hardly less potent in the home, and especially is this true as regards those members of the family who spend the greater part of each twenty-four hours in the house. Anything which contributes to that condition summed up as "a sound mind in a sound body" necessarily contributes to increased efficiency of man, woman and child, and coincidentally cuts down expense in the matter of medical attendance. The system which accomplishes this will be our choice.

Following the subject in all its bearings to a logical conclusion, there seems no escape from proof that "the best is the cheapest."

Confronted and perplexed at the outset by convincing catalog data bearing upon the several methods of heating and types of apparatus, viz.: steam, hot-water and hot-air, the prospective builder of the house is driven to consult his friends who have had experience. The result in such cases can usually be summed up thus. "'Tis with 'their' judgments as 'their' watches; none go just alike, but each believes his own."

Not the specious arguments of the salesman nor the advice of friends, but facts should determine the selection of apparatus, and facts are sometimes hard to come at.

It is now generally comprehended that ventilation is a prime

necessity, and that ventilation and heating should be the inseparable achievements of any method or type of apparatus.

To such readers as have never sought to define what the word ventilation really means, it might be sufficient to say that a room in which the percentage of carbonic acid is less than 10 parts in 10,000 parts of air and consequently not to be detected by odor, is sufficiently ventilated, that is, the air is of a sufficient

degree of purity to support healthful respiration. This chemical condition of the air, coincident with the most nearly uniform temperature possible of 68° to 70° indoors in our American climate, constitutes perhaps the best definition in a few words of the conditions sought.

Considering the possibilities within the scope of the hot-air furnace, the usual claim that it comprehends, in the method of which it is a part, both ventilation and heating, whereas steam and hot-water heating do not, may be dismissed as a mischievous half truth. Steam and hot-water heating by means of "direct" radiators in the rooms exclusively do not, it is true, provide for ventilation, but a single "indirect" radiator will provide, through its fresh air supply pipe and one or more registers, sufficient renewal of the air indoors to maintain good and sufficient ventilation.

On the other hand the hot-air furnace is dependent for its success upon the heating of a quantity of out-door air far

in excess of that required by the exigencies of ventilation and at an expense for fuel which is prohibitory.

The usual failure of the hot-air furnace to deliver heat to exposed rooms during severe windy weather is too generally known to require a demonstration of the reasons here. Its cheapness in first cost is too inconsiderable an advantage to weigh against its large expense of maintenance and failure to give entire satisfaction.

So far as it may constitute a menace to health, not even stoves in the rooms can vie with the average hot-air furnace in the dissemination of dust, ashes and coal gas. In short, this type of heating apparatus may be dismissed at the outset as having no place in the domestic economy of modern life.

Hot-water heating, only until recently, has possessed the inherent



The German architect makes his heating apparatus a decorative feature by using unfinished radiators and covering them with a removable screen

qualities that go to make up the most pleasant, healthful and economical method procurable, but at the present time steam-heating is much superior to hot-water in several particulars, which will be noted.

The "mild, pleasant, summer-like" quality of the heat from hot-water radiators so frequently urged in favor of hot-water heating has led many people to conclude that this desirable condition is due to the water contained in and circulated through the system, whereas these agreeable and healthful conditions are due entirely to the moderate *temperatures* of the hot-water radiators, which to all intent and purpose might as well be filled with molasses, hot-air, gas or vapor of the same temperature. The only effect upon the air of the room exerted by the hot-water radiator is to warm it gradually and steadily, instead of "violently" as with *pressure* steam heating. The water in the system contributes no moisture or other element to the air of the room; just temperature.

The chief objection to hot-water heating consists in the impossibility of quickly increasing and reducing the temperature of the house; particularly in the latter case, which occasionally entails the necessity of opening windows to allow the excess heat to escape. Water is capable of holding so much "heat in suspension," that it becomes at once a most intractable medium to control.

For instance, and for the sake of comparison with steam, a hot-water apparatus comprising 600 square feet of heating surface in the radiators would contain altogether about 225 gallons or 1,880 lbs. of water. If this water were let into the system from the street main at 40° and heated to an average of 180° temperature, the whole quantity would contain about 263,200 British Thermal Units: B. T. U. (the unit of measure of heat) representing under average conditions the burning of about 33 lbs. of coal.

A steam-heating apparatus comprising 600 square feet in radiator surface would contain about 50 gallons of water and 25 cubic feet (about 1 lb. avoirdupois) of steam. Under atmospheric pressure (212°) this amount of water and steam would contain 55,380 heat units, representing a consumption of about 7 lbs. of coal.

In the hot-water radiators and pipes alone, there would be contained about 230,000 heat units, costing 29 lbs. of coal. In the steam radiators and pipes there would be about 1,150 heat units costing about 1-6 lbs. of coal. In short, about 180 times as much capital (sinking fund) is invested in the heating medium when

water is the medium as when steam is the medium.

Provided there were no sudden changes in our climate, the above facts would signify no advantage in steam-heating, but as it occasionally happens that the outdoor temperature will rise twenty to thirty degrees in two hours, the need of quickly cooling the radiators becomes apparent. With steam-heating this can be done without loss in a few minutes by closing the valves and allowing the steam to

condense, but with hot-water heating the large amount of heat in the radiators cannot be gotten rid of without the loss incident to opening the windows and allowing it to escape.

Steam-heating is familiarly understood to refer to the use of steam delivered into the radiators by pressure at not less than 212° temperature, and this form of steam-heating is not as desirable as hot-water heating except in the one particular noted above.

For the practical purposes of this article, steam may be said to be (as commonly understood) the vapor of boiling water which is at 212° F. in an open vessel at the sea level and at, say 160° F. in an open vessel at the top of Pike's Peak or any similar altitude where the weight or pressure of the earth's atmosphere is sufficiently reduced to let the vapor (steam) get away from the water.

To make available the lower temperatures possible with the production of steam is at once to render steam as a heating medium the equal of hot-water in the mild salubrity of the house and economy of fuel, and its superior in flexibility of control.

The one desideratum in the undertaking is a partial vacuum within the heating system, said vacuum corresponding with or the equivalent to a reduction of the atmospheric pressure surrounding us and everything about us. Water will boil and vaporize in a complete, "perfect vacuum" at about 90° F., but a partial vacuum permitting vaporization (the production of steam) at from 150° F. to 180° F. meets all requirements of agreeable and hygienic warming of the house.

Simple devices bearing quite numerous different trade marks, are in practical use at the present time, which make the phenomenon of steam at any temperature from 150° to 212° a simple accomplishment; likewise devices variously called "graduation, modulation," etc. Valves are today in common vogue which permit a mean temperature of the radiator much lower than 150°, so that as wide a range in the temperature of the radiating surface is possible with steam as with water, below the advisable maximum of 180°.

To secure the desirable qualities of hot-water heating as well as to avoid its undesirable features, an apparatus should comprehend the possibility of an almost continuous state of partial vacuum, so that the high temperature of pressure steam in the radiators will seldom occur; and any apparatus which contemplates the necessity of frequent recourse to steam pressure as a means of securing the degree of vacuum necessary to low temperature steam is deficient to the degree of said frequency.

The prospective builder of the house should understand that his interest and comfort as the future dweller therein are not conserved by the fact that "smaller radiators will do the work" than are required for hot-water heating, when the use of these smaller radiators contemplates the use of high temperature steam during cold periods of weather, at which times it is the custom to exclude as much out-door fresh air as possible.

(Continued on page 401.)



The steam radiator is not placed where necessity demands, but can be located where it can heat incoming cold air



The improved vapor systems bring the steam in at the top of the radiator. It flows steadily and obviates all "knocking in the pipes"



The winter is often very severe even on the sparrows and the chickadees, and a little effort can save many to be cheerful companions during the winter and will keep some of the song birds by you throughout the year

Feeding the Birds in Winter

WHAT MAY BE ACCOMPLISHED IN TAKING CARE OF THE BIRDS THAT STAY DURING THE COLD WEATHER—SUCCESSFUL WAYS OF MAKING FRIENDS AND COMPANIONS OF OUR GARDEN BIRDS

BY HANNA RION

Photographs by Craig S. Thomas, Grace Aspinwall, and others

THE winter care of the birds really begins during the summer before. For then it is that we plant great quantities of sunflowers, planting so many we may leave at least half the seed heads untouched for the autumn birds to help themselves to, the remainder being stored away in crates carefully protected from rats for the bird hard times in midwinter.

There is also a large patch of peanuts planted for the chickadees and nut-hatches. The chickadees eventually become so tame they permit us to offer them peanuts in the fingers, perching on the hand when nibbling. The peanuts (crushed) are daily spread on a shelf extending beyond the studio window, in full sight, where we may enjoy the merry feasting of the chickadees and the sly thief-like snatching of the hatches.

During the autumn little bird hotels are erected in sheltered spots, out of cat-reach, in trees near the house for the universally and unjustly despised English sparrows. We take ordinary wooden boxes and by adding partitions form various lit-

tle apartments, for even sparrows like private rooms and, having once appropriated them, hold and defend their property against all intruders. A little carpentering increases their attraction.

During the snow storms they will patronize the "Catlas-Jar-Inn," and when ice hangs heavy on the boughs overhead they will hie to "The Sign of the Bumford Baking Powder." After five years of intimacy and unprejudiced careful investigation of the English sparrow, I have not found one thing their detractors say to be true. And they *do not* chase other birds away.

I have attracted all the sparrows I can to my garden and I have more robins, juncos, thrushes, cat-birds, chickadees, nut-hatches, hermit thrushes, Phoebe, orioles and song sparrows than can be found anywhere else within miles of the Wilderness. The sparrows live on terms of greatest amity with all the other birds—their quarrels being confined to their own family.

And as for quarrelsomeness, the nearest approach to actual dueling I've ever witnessed was between two robins. For sheer



The winter care of the birds really should begin in the summer when we may make them at home at the bird bath and plant sunflowers to provide them food

peevishness and peckingness, none surpass the white-striped headed sparrows of high degree, while even the dear chickadee is remarkably quick of temper and snippish.

The poor English sparrow has been so persecuted and talked about he is very sensitive and especially grateful for kindness, showing actual devotion to a human friend. When I go out under the apple trees and call, "Come on, little children, come on," they flock to me from all directions, fluttering about my head like tame pigeons. The morning after a snow storm I find the embroidery of little feet all over the front porch up to the very door, where I suppose they would knock if they were stronger. There they sit or flutter about the porch bare vines, knowing they can count on us for food supplies during this stormy time.

The sparrows suffer so much during the winter; we always have a few cripples in our flock—poor birds who perhaps perched for the night on a bare bough and woke in the morning to find their feet frozen to the limb.

For two winters we entertained a one-legged junco who, I'm sorry to say, was much persecuted by his kindred, but perhaps it was for some individual unpleasant trait that I didn't know about. He eventually waited until dusk to come alone for his meal under the studio window, stumping about most pitifully, using one wing as a sort of crutch.

The birds learn to look on us as protectors and it is a proud position to fill. I'd even rather be a bird protector than a policeman on Broadway.

When we are awakened, before the workman's whistle, by a hullabaloo at our window, and rush out in nebulous garments just in time to save our sparrow colony from a hawk, it is indeed a proud moment.

During last summer we noticed that the sparrows deserted the drinking bowl for days and kept trying to raucously try to tell us some scandal about it, but it was only by a chance glance out at dinner one evening that



A bird table with its bath and platform for crumbs makes friends with the birds



Even the sweet voiced song sparrows were induced to stay late into the autumn



The various attractions, especially the bath, brought cat-birds and made very tame companions of them

we discovered the trouble. It was a rat who sneaked out to the bowl from the cellar, stealing the bird bread and perhaps pouncing on sparrow orphans and widows.

A small child's rifle aimed nervously and amateurishly fired, only served to wound the rat, and then there was a frolic. All the family rushed at the rat with various nice weapons, such as a chafing-dish, brass poker and Samurai sword, and when the sparrows saw their enemy wounded and our efforts to slaughter him they joined us with all fear departed, diving down between our weapons, getting in the way of blows, pecking the rat's back until somehow, somebody—sparrows or we—killed the enemy. There was a general festival and a grand funeral which all the birds attended.

Of course, taking the responsibility for the birds can be carried too far, if the birds begin to shirk responsibility themselves and expect you to look after the children who desert the nest too soon, the parents demanding, "Where is my wandering boy?" every time you go into the garden, instead of feeding the little bawlers themselves.

Then, too, it's a terrible responsibility to have to assist in the general pandemonium when an entire brood of post wrens fly the coop at once.

There was "Spilly Willy," the post wren, and his little wife, "Tildy." He came to the back porch, then to

the front porch, searching and begging for a home, having been unexpectedly accepted by Tildy the day before. We hurried and found a little stunted failure of a gourd that looked about the size of his necessity and broke a fine knife making a round door, and mashed a favorite finger nailing it up to the veranda post. Spilly Willy accepted it in three hours, and he and Tildy nearly killed themselves spilling over with song-joy while trying to fit four-inch twigs of wood cross-ways in an inch door hole. Then we found another gourd,

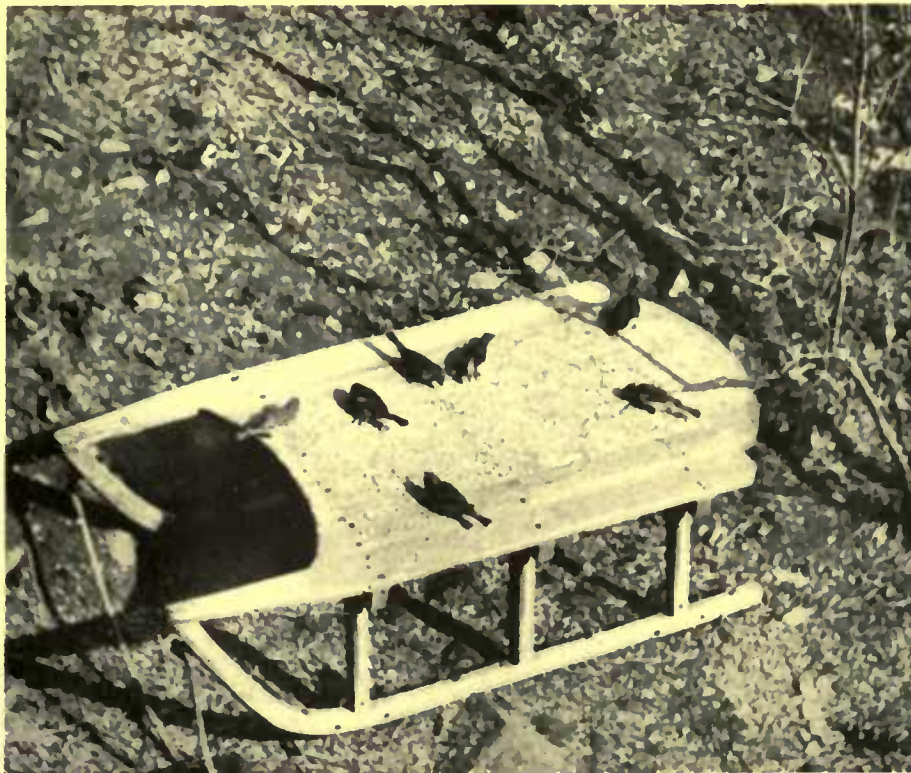
a size larger, with a dried crooked stem (which would make a beautiful balcony), and in this one we made two doors, front and back, and nailed that to another post in case Spilly Willy had a cousin or college chum who wanted to go to hurried housekeeping, too. We had scarcely gotten it in place when Tildy—curiosity-beset woman—flitted over to investigate the new house and went in the back door and out of the front door and sat on the balcony and went indoors again and squatted down to try its hatching qualities, and then out she came and called to Spilly Willy (who was still trying, manlike, to do an impossible mathematical problem with twigs) to come over and behold this model abode with all the modern improvements. After much feminine argument Tildy had her way, of course, and Spilly Willy reluctantly gave up the rustic cottage he'd set his heart on and began all over again the task of bringing twigs for the furnishing. I never saw such work as those two accomplished for the next few days—and I never heard such rapturous singing as they kept up perpetually, perfect cataracts of music tumbling from their little throats.

Then the laying started and poor Spilly Willy was completely left out of it—didn't know what to do with himself, didn't even have a pipe to smoke—so he just sat on the balcony while Tildy laid the eggs as fast as she could, and sang his very heart out serenading and encouraging her. Spilly Willy no longer had the freedom of the home, as he had when there was house furnishing to do; Tildy treated him as if he were a bull in a china shop and wouldn't let him do more than peek in at the precious fragile eggs, so Spilly Willy, having no club to go to, formed a habit of going to the first-chosen gourd cottage, sitting contemplatively therein.

Tildy sat and sat and sat and Spilly Willy sang and sang and sang, and brought all the delicacies to be found in the universe



The bird house will save many a life in the winter, but be sure to build it high out of cat reach



The winter feasts of the chickadees and nut-hatchers consisted often of crushed peanuts



The tiny wrens can be easily domesticated and will rely entirely on human assistance if they are allowed to

to his little wife until at last the first son and heir emerged from his shell.

After little Billee arrived, other little brothers and sisters appeared, until there were in all six hungry, cavernous mouths to feed. Tildy and Spilly Willy nearly worked themselves to feathers and bone providing for that family, until I was afraid the world's store of grubs and spiders would be exhausted. And Tildy kept reminding him what a blessing it was they moved to the model house, for now she could go in at the back door and feed the children and out of the front, when he arrived at the back door with more food.

Then came a day when Spilly Willy summoned me with piercing shrieks of alarm. I rushed out and sat long before I understood. Tildy, it seemed, had gone off as usual for a spider and, alack and alas, had not returned. There was no use to hunt—I didn't know where to go—I could only say all the comforting things I could think of and keep a vigil over the little flock while the disconsolate husband sought far and near, coming back every now and again with food which he hastily and silently delivered only to be off again, desperately calling in heart-breaking tones, through the Tildy-less distance.

Toward the end of the third hour, what with his heartache and double duty of feeding the children, Spilly Willy was nigh dead, and I never saw a sadder thing than when he went over to their first

little home and crawled inside, his back turned to the world, alone with his memories and his sorrow.

We had both given up hope—I believed a cat had gotten her or she had become entangled in a wire fence—when suddenly a Niagara of song sounded near.

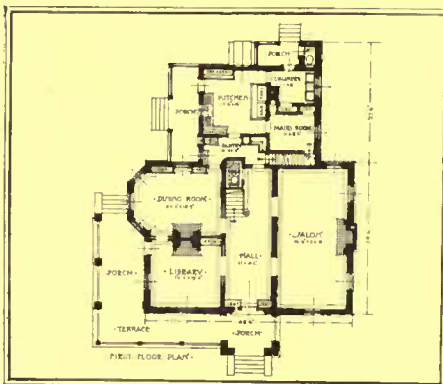
Spilly Willy sprang forth from his retreat as one electrified, and gave a cry of joyous relief that gripped my throat. It was Tildy in the flesh, Tildy safe, Tildy back again to her lover and her brood! She gave Spilly Willy one gleeful greeting, and song of

(Continued on page 402)



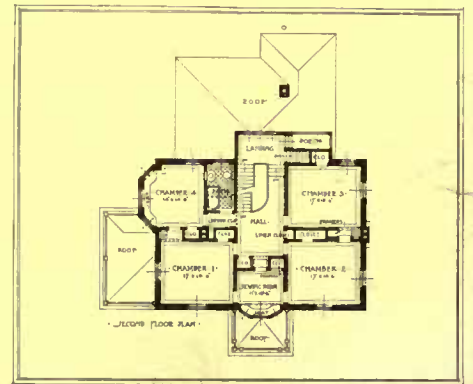
Mr. Massey's home is a modern adaptation of the Colonial which shows many of its best features. The brickwork is Flemish bond, giving a rich color effect.

Good planning is shown in the kitchen wing and the bedrooms, each with a double exposure



THE HOME OF
MR. GEORGE W. MASSEY
LAMBERTVILLE, N. J.

C. E. Schermerhorn & Wilson K. Philips,
associate architects



The drawing-room with its large glass chandelier and chaste white wood-work is of approved Colonial design. A little deviation is made in the hearth and fireplace, where a pleasing effect is obtained by the use of delicately colored tile



From the door a staircase leads up to a broad landing which has almost the value of another room



The woodwork of the dining-room is of birch and cherry to match the mahogany furniture. The fireplace here is also of hand-made tile



In the kitchen built-in furniture is a feature. The shelves in the doors give almost double capacity



Almost all decoration in the bedroom is left to the furnishings, which are family heirlooms of fine old mahogany



A very attractive feature of the dining-room is a leaded glass window, made of various sorts of white glass with a touch of color in the center. Here also the spirit of Colonial times is evident in the mahogany furniture and the chandelier of modified Colonial lines



Inside the House

Timely Suggestions and
Answers to Correspondents



The Editor will gladly answer queries pertaining to individual problems of interior decoration and furnishing. When an immediate reply is desired, please enclose a self-addressed stamped envelope.

Inexpensive Furnishing

EVERYONE has not an attic of treasures to resort to. City-ites at best, have a storeroom where the kind of treasures one finds in an old country house attic are not to be found. Last summer in our attic I unearthed from behind a pile of old bed springs, mattresses, etc., three small old-fashioned kitchen chairs. They were in pretty bad condition, the splint seats broken, some rungs missing, and the old red paint was very rough.

I took the chairs, washed them carefully, had new rungs supplied where they were missing and then began my work of restoration.

I sandpapered the old paint off, getting down to the smooth boxwood or applewood of which this type of little old-fashioned chair was usually made.

After the wood was perfectly smooth and clean, the dust made by the sandpapering having been washed off, I applied a coat of dull black paint, a second and a third coat following as each application was thoroughly dry.

I then purchased wooden seats, which may be had at any ten cent store, and fitted them to the chairs where the splint seats were too far gone to be substantial. Had the original splint seats been in good condition, I should have left them as they were, or had a maker of rush seats been available, I should have had rush seats put in. Neither being possible, I upholstered the seats, using hair stuffing with a good, stout denim covering. Over that I put "crinkled tapestry" in old blue. I then painted a little design in blue and white clematis-shaped flowers on the broad back pieces of the chairs, and they were finished.

A yard and a quarter of any double width tapestry will make covering for four moderate sized chair seats. A twenty-five and a fifteen cent can of paint was enough for the three chairs. One is apt to have some hair, cotton, excelsior or floss in the house and denim for the lining comes at twenty-two cents a yard.

These chairs cost me very little, and they were attractive enough for the living room or bedroom of any not too pretentious home.

By hunting around one can pick up old chairs at a cost of from twenty-five cents to a dollar and a half that can be done over at home into very handsome pieces of furniture, providing each process in the restoration of the whole is carefully done, so that the result will not be amateurish.

I had the opportunity last summer to buy some very pretty chairs for a dollar apiece. They were old-fashioned cane seated chairs which had been newly enameled in white, at a cost the dealer told me of seventy-five cents each, and newly caned at a similar cost; rather a losing proposition for the dealer, but a great bargain for anyone who wanted some very pretty chairs for a white bedroom.

In the same shop were some charming little chairs in very bad repair for twenty cents each. The greatest expense in restoring them would have been in having new rush seats put in. Otherwise they

were in excellent condition and charming in proportion.

If one has not a large pocketbook, but a realization of what can be done at a moderate cost, providing one has a little ingenuity, a home can be furnished throughout for a very small sum of money. The largest expenditure in such furnishing is of time and labor. However, the pleasure of gathering the odd bits together and the enjoyment in doing the work, to say nothing of the satisfaction one takes in the finished result, more than repays one for any inconveniences in the process of accumulation and restoration.

Decorating Over Wall Paper

THE condition of our living room when we undertook to redecorate was this: A room with north and east exposure with natural oak trim in very good condition, a red brick mantel, the red inclining toward brown and the walls covered with a much-faded dark green crêpe paper.

The ceiling had a six-inch drop and was papered with a plain mat paper in rather dark cream.

My ideal was a rough plaster oil, stained. This was clearly impossible but I finally achieved the same effect in the following manner:

All loose ends of wall paper were re-pasted carefully to the walls and the whole surface thoroughly sized.

Sizing in drying has a tendency to draw the paper from the wall.

Where this was the case it was again pasted and thumb-tacks used where the paper seemed obstinate.

Over the sizing were applied two coats of ordinary cream paint, the shade of the lightest parts of the trim. Had the paper been a lighter color one coat would have been enough.

When the second coat was thoroughly dry a coat of light wood-stain was applied with a carriage sponge. (Stain such as grainers use for white oak or maple.)

The stain was reduced with turpentine to obtain the proper shade.

Beginning at a corner at the top, the sponge was passed with a circular motion along the moulding to the nearest door or



When painted and upholstered, the old chair looked quite like a well-preserved antique



Wicker stands and tabourets have the advantage of being much lighter than wood

window casing, back to the corner and so on down to the baseboard. Each passage along the wall covered about eighteen inches of wall space.

Care was taken to go over the ground just enough to blend the lines but not to give a muddy appearance.

When this occurred the whole section had to be washed with clear turpentine till all stain was removed and the stain repaired.

When all the wall had been stained, the corners seemed to have lost their plumb. This was remedied by dipping a small brush in the stain and lightly passing it the whole length of each corner from top to bottom.

Without removing the paper the ceiling was given two coats of one of the preparations found on the market similar to kalsomine, matching in shade as nearly as possible the groundwork of the walls.

The finished room was entirely satisfactory and has stood the test of time, for the paint was applied three years ago and the walls show neither fading, rubbing, nor ripping away of the paper.

I did the entire work myself, the cost of materials was less than two dollars and a half.

Other colors may be obtained by using other shades for groundwork with corresponding wood stains for the surface, but I chose the yellows and browns as it brought into harmony my light woodwork, red mantel, and black walnut furniture upholstered in brown leather.

Rag Rugs

THE rug woven from our hand-sewed rags proved so satisfactory that we decided to fit out the bedrooms of our country bungalow with them, matching the warp with the general color scheme of wall paper and draperies. But where were we to get more rags? The last rug had emptied our rag bags, stripped our piece trunks, and even taxed our good

neighbors for the material for the final pound ball. The weaver volunteered to sell us balls of rags in hit-or-miss colors, but we felt dubious about his source of supply. Since we must have new rags we decided upon that heavy chambray which retails at 6c. per yard. We found that we could get it by the piece at great reduction from the wholesale shops; so we bought one piece of rose, one of blue and one of natural or unbleached color. Then came the problem of reducing them to rags. Surely it was not worth while to cut them into short strips merely to sew them together again! We finally hit upon the expedient of cutting four or five yards from a piece, tearing a strip about 1¼ inches in width down one side, turning the corner by the aid of a little snip of the scissors, and when that side was torn across to within 1¼ inch of the edge, turning the next corner, and so on around to the starting point (still not cutting off the strip) repeating the operation until the entire piece was cut into one rag many yards in length. While one wound this into a ball, another piece was hastily prepared in the same way and its end affixed



The trays have colored hunting scenes in attractive colors set in beneath the glass

to the first strip so that within a few hours several pound-balls were piled in our basket. Some old sheets were treated in the same way (old material always cut in strips a trifle wider than the new) and in a fortnight everything was ready to send to the weaver. We insisted upon the "four and four" weaving, a little more expensive but making a much more artistic and durable rug. After the required number of yards had been woven in any one color, the weaver often finished off the warp on the long or short lengths (strips two or three yards long) bordering each end with rows of a contrasting color, and allowing for fringe. When these were unravelled and tied, they made excellent runners for bathroom and halls. Where the color of a rug is given mainly by the warp, it often pays to use the wool warp (adding about two cents a yard to the cost) or else the "oil-boiled" as it holds its cotton warp color long after the ordinary cotton warp has been reduced to nondescript hues. We found that rugs woven in tan and blue warp were serviceable for dining room and sewing room, as the debris is easily gathered up from them. On the porch the rag rugs gave a home-

like touch and stood rough treatment from weather and foot tracks. And in the four-poster room the rag carpet gave an old-time atmosphere and ideal setting for grandmother's furniture.

Wicker Trays

TRAYS for all sorts of uses, and small stands and tabourets for the accommodation of smoking sets are made of English wicker and for the time being at least, are used in place of the same articles made of wood.

The wicker is so closely woven and of such substantial quality that to all intents and purposes it is quite as serviceable as wood, to say nothing of being much lighter in weight and the color, a rich shade of brown, is most effective.

All of the trays and stands are supplied with sheets of glass that fit over the tops, and under the glass are colored prints that add considerably to the decorative appearance. Some of these prints show landscape or water scenes, but the majority are sporting subjects, either hunting or coaching scenes, which with their rather vivid colors, seem more in keeping with the brown wicker frames.

The smoking stands and tabourets are of nearly the same design, the principal difference being in the height. The tabourets have an additional lower shelf which makes them rather more serviceable in point of capacity.

Another piece in the English wicker is a folding stand, quite a novelty that adds no little to the appearance and usefulness of the trays for which it is designed. It is much like the regulation butler's stand in size and shape, and has legs of wicker with brass tips. The tray fits snugly over the top of the stand, making a firm, substantial table for the afternoon tea things, the smoking set or the after dinner coffee.



The tall folding stand is made to fit the trays exactly and makes a substantial table for tea or coffee things



Garden Suggestions and Queries



Conducted by
F. F. ROCKWELL

The Editor will be glad to answer subscribers' queries pertaining to individual problems connected with the garden and grounds. When a direct personal reply is desired please enclose a self-addressed stamped envelope

December

NO season is enjoyed more enthusiastically and more universally than the Christmas season. Through centuries it has remained the holiday of holidays, and the most cynical observer, if he is willing to acknowledge the truth, must admit that the Christmas spirit is a vital, energizing thing.

"Peace on earth: good will toward men." After all, that is a pretty succinct presentation of the idea, even from the individualistic point of view. Only don't be content to try to put on that mood, like a fancy-dress ball costume, once in fifty-two weeks. Get the habit; make it chronic. And the surest way of doing it is to try to beautify and develop some little spot of ground, no matter how small, about your home. In most of us, no matter how thickly plastered on and highly polished the varnish of city living may be, there is beneath the hide a natural hankering to get our hands dirty in the vegetable patch, once in a while, or let loose a few justifiable cuss words when the plane catches and slivers up a nicely smoothed pine board that was just about ready for the cupboard in the dining room.

I hold no brief for squabs, back-yard egg farms, mushrooms or other get-rich-quick-sure-and-easy schemes that can be put into operation in a good sized hatbox, and without experience. In fact, I am not sure that you cannot add slightly more to the bank account by staying in a flat—although in the end it may be transferred to the doctor. But I do know that there are several ways in which, with a very small amount of ground to work with, living expenses may be cut down and enjoyment built up. And if there are children to be considered, the advantages cannot be measured in figures between vertical red lines. In all things the superstructure is limited by the strength of the foundation, and during the tender years of life the foundations are laid. They cannot be too wide, too deep, too strong. And get some dirt with it—a rough, hummocky slice of an erstwhile farm being better than a filled in lawn, with a strip of cement path and a maple-sapling. Remember that what you

want is the raw material, which you will have the fun of working into shape with your own hands. And that job will be no sinecure. You will probably be long in getting to the end of it. But nothing will yield you greater pleasure, or more enduring profit.

Look before you leap—look carefully and find a good place to land. But do not be afraid to make the attempt. If you can, just get a good foot room, and hang on, the improvements, down to blue hydrangeas in front and a choice collection of dwarf fruits around the garden in back, may gradually be added in the years to come.

There's only one life to invest. So try



The chief duty of the early winter is mulching. In place of the withered portions of the plants, cover with leaves or straw

to get your layout as early as practicable and then develop it so rapidly and thoroughly as circumstances will allow. Remember always that the real return on effort is not an accumulation of bank deposits, but what you are getting out of life as you go along.

Outdoors

IF your garden work has not all been attended to, remember that strawberries and the small fruits—raspberries, etc.—will need their mulch early this month.

The rose bed and any tender spots in the hardy border, should also be attended to. Leaves, held in place by small boughs, make a good mulch. If the rose bushes have thrown up long shoots late in the fall, that seem top-heavy and likely to whip about in the wind, cut them back about a third.

This is also a good time to get a lot of work in the orchard cleaned up. Be sure that you are keeping your trees pruned out to the open head shape. Cut out branches that cross or rub together. Look into the subject of winter spraying. An article on another page of this issue gives particulars about what to spray for, formulas, when and how to apply, etc. In these days one cannot have good fruit without spraying.

Fruit and Vegetables in Storage

It will pay handsomely, if you can get the time to go over your pears, apples, etc., and select some of the best and firmest and pack them away carefully in cracker boxes to keep for especially late use. You will probably find many that have small soft or bad spots which are all right to use now, but which, if left undisturbed, would not only soon spoil themselves but spread trouble through the lot. If you are keeping any onions by the freezing method, be sure that they are put where they will stay frozen. Look over your squashes and put the firm ones where they cannot get even severely chilled. See to it that the celery is dry and kept cold. The storage cellar has been spoken of before. It is not too late to provide a cool, dry place for your winter fruits.

Plants in the House

During the dull, dark days of mid-winter, special care must be taken with the house plants. *Do not over water.* During this season most plants are resting and need just enough water to keep the pots from drying out. Plants in full bloom require a little more, and may in many cases be given extra food, in the form of liquid manure or fertilizer, to advantage.

Keep them clean. In cold weather, when windows must be kept tightly closed most of the time, and the air inside gets very dry, conditions will be favorable for the appearance of insect enemies—aphis, the small green plant lice, mealy-bug, the cottony, buzzy looking stickers, red spider, size of a pin point and making the leaves turn yellow and drop; these and others must be guarded against. Don't let them get a start! Formulas and other methods of fighting will be given in detail in next month's department.

Give all the air you can. Nothing is more important to healthy plant growth than fresh air. They should have all it is possible to give without letting the temperature get too low—60-70 in the daytime is right for most house plants. Never, however, let cold air blow directly onto the plants. Ventilate through a hall, an adjoining room, or window on the opposite side of the room, with a screen in front of it. Once in a while, on a bright day, give the plants a good syringing and let them dry off in the sunlight.

Study your plants: find out their individual needs. Get all the information you can about them.

A Use for Dust

DRY dust is a valuable absorbent. Gather it off the surface of the road or walks after a long dry spell and store it in boxes for future use. It is good in the hen house if spread over parts of the henery or barn daily. Wherever there are foul gases and a disinfectant is needed this dry dust is useful. Mixed with ground tobacco stems and leaves and dry manure it makes an excellent fertilizer and is worth a good deal in developing plants in a hurry.

J. J. O'C.

Mulching Ivy

THE success of gardening depends entirely upon preparatory measures. Along this line first of all comes mulching—the most important of all the garden work. Try it and see how true this is.

A slip of ivy taken from the walls of Kenilworth Castle and brought to this country just hugged the ground year after year, never attempting to climb until a mulch of fine stable-manure was applied to it, in the fall of the year. When attention was called to it, the answer would be, "Kenilworth ivy is of very slow growth."

After the mulch was applied, covering it pretty well, it began putting up its tendrils all along the wall. Its new growth, a light willow-green, looking so thrifty and beau-

tiful. It now makes a fine display, almost covering a window and showing leaves that are three times the size of those before applying the mulch—and many times more beautiful. Its feeble growth, as well as the coloring and the size of the leaves, was helped by the mulch. C. B. H.

Planning Garden Work

THE successful gardener is the man who has his garden in mind all the year. In the spring, its preparation and planting; in summer and autumn, cultivation and harvest and the preservation of its products, and in the winter, reflection upon causes and results, and careful planning. To leave the choice of seeds, fertilizers, tools, etc., until the first warm days of

Peas, beans, potatoes, beets, carrots, and corn require from one-fifth to one-fourth of the weight of the entire mixture of fertilizer to be some form of potash. Fruits and berries require about one-third.

Spreading the garden with compost increases the efficiency of the prepared fertilizers.

The mixing of fertilizers may be done some weeks previous to planting time if the mixtures are stored in a dry place. Be sure to label each mixture.

For a garden plot of one-quarter of an acre set with small fruits, this mixture is very helpful: Thirty pounds of ground bone, forty-five pounds of muriate of potash, fifty-five pounds of acid phosphate.

For the same area planted with garden vegetables, twenty-five pounds each of ni-



The attractive garden is not the product of a single spring planting, but depends just as much on careful winter planning and arranging to produce results such as these

spring is to be governed by the vague memories of last season's work and by the plausible arguments of seedsmen and agents. To previously form logical plans is to vitalize one's garden work and to progress. Such gardening is a good investment with sure returns at the end of the season.

Under ordinary conditions, with the usual garden list, the first question is that of fertilizers. Ready prepared fertilizers for the garden can be obtained from local dealers almost anywhere, but one can work far more intelligently by buying the separate ingredients, mixing them according to the needs of the garden under consideration. Fruit, the rapid-growing vegetables, and those which require several months to mature, can all be made economically fertilized by special mixtures.

trate of soda, sulphate of ammonia and ground bone; forty pounds each of dried blood and muriate of potash and one hundred and fifteen pounds of acid phosphate is an effectual fertilizer where compost has been spread. On poor soil double the quantity.

The necessary garden tools should be procured early enough to permit one to become familiar with the parts and their adjustment and garden seeds should be ordered while supplies are plentiful thus avoiding the danger of substitution on the part of the seedsmen. Enough seed should be purchased to provide for a succession of radishes, beets, peas, lettuce and other vegetables.

Plan to have the preparatory plowing and harrowing done the last week in March, so that planting may be early.



EDITORIAL



The Situation— Outdoors and In

WHAT is all this talk about situation in house building and the fitting of house to land and room to house? It is merely the old law of harmony made applicable to the home not merely to develop it as a work of art but because when planned most consistently its economy of comfort is greatest. The days of a roof and four walls are past, because history and civilization have advanced our tastes and increased our desires. The cave man might have found little to bother him in a stone bed; the present-day citizen can be irritated by an ugly color scheme. It is not elegance that is demanded but relation of parts. In several instances described in this magazine house builders have sought and obtained this ideal. The section upon which they chose to build appealed to the architect's constructive imagination and he designed a type suitable to the situation. That is the hope of architects. They accepted his ideas and carried them out still further by seeking to have everything inside the completed dwelling add to the unity of the whole. But how often is the good beginning spoiled by a poor completion of the work. The style of exterior design is forgotten in interior decoration, and the furnishing is undertaken as chance dictates. It is not a matter of greater expense to complete a scheme. In these several instances it was a saving. But the greatest gain is in the living. As we are influenced by our environment we will find our days run much pleasanter in a home where there is no constant fight between the house and the things in it. The old song can then be changed to this rendering: Behold how good it is to dwell in a house where there is unity.

The Grip of Winter

IT is only within very recent years that Winter has begun to be appreciated. Even so keen a nature lover as Thoreau, writing fifty years ago of his sojourn at Walden Pond, dwells but lightly on winter. He tells of the animals and their winter habits, of fishing through the ice, of the ice harvest, but of the beauty of nature in her winter dress he says very little. Perhaps he was too close to nature to appreciate her Winter, the need of replenishing his fire and chopping through a foot of ice for his morning's water, too grim realities for even his appreciative moods. We have the advantage of him in this. It is a far more comfortable and enjoyable experience to pay a short visit to the Winter woods from our comfortably heated homes of today. There is less chance for the real zest of it to be numbed by the reality. And he who has once tramped, preferably on snowshoes, over the blanket-like drifts of the Northern woods needs no suggestion that he repeat the experience. He would as soon miss the thrill of a hunt through the woods for the May wildflowers.

For the man who really knows the beauties of the four seasons—knows them by intimate association with their moods, a choice between them is difficult. And yet it does seem to us that Summer is the least inspiring of the cycle, that the sweetly melancholy days of Autumn, with a tang of burning brush in the air, are more satisfying than the impatient, hot-headed Spring and that the vast silence of nature's Winter sleep in the woods, when the snow lies deep and unbelievably spotless, is, after all, the year's most glorious season.

Around the Chip-Block

THERE is a very humble institution that is in danger of extinction in modern life, and that is the wood pile. Perhaps you are one of those erring ones who would with perfect equanimity see it relegated to an honorable past, provided only that there is a goodly supply of coal or gas or steam in sight. It

is fortunate then that there is yet time in which to convince you of your error. A great limb of one of the lawn maples has lain on the lawn out there for a month or more. To the uninitiated it has a potential value for fuel, but that is all. If, however, you will take an axe and investigate the matter you will find that it has a potential value that is far greater. Mark the log off into lengths of a convenient size for your fireplace and swing away at it with your axe. With the flying of the thick chips from beside its keen edge there will come an appreciation of several things. There will come back to you a sub-conscious knowledge of hewing wood that comes from your pioneer ancestors. There will come also a keen relish for accomplishment that is not dulled by aching muscles and a tired back. There will come an appetite for food that may cost far more to satisfy than the value of the hewn timber, but no matter, you will have gained in health and in the knowledge that the wood pile is one of man's most cherishable possessions.

The Woman's Opportunity

"YOU surely don't intend to stay out there all winter!" This was in reply to Mrs. Field's statement that her home in the country would be ready for occupation late in the fall. Her affirmation brought a flood of criticism that ended up with the remark that such a course would be suicidal. Her visitor claimed she would die of ennui, would become cramped of vision and narrowed in mind away from the city's culture and opportunity for intercourse. Those whose life fortunately is spent in the open can afford to smile with the wider knowledge that refutes such ignorance. But there is something in the question which demands our attention.

Out of the tourney of suffrage arguments, among broken weapons of discussion, we find the claim that the mother woman is the domestic drudge under present conditions; that she must of necessity be so for she has no incentive or opportunity to be otherwise. Let us leave the question to the combatants; we have rashly approached too near. It gives us a thought for the country woman, however, and an answer to Mrs. Field's uncomprehending friend.

The matter is summed up so well in Prof. L. H. Bailey's book, "The Country Life Movement," that we give it direct:

"It is as necessary to the woman as to the man that her mind be open to the facts, phenomena and objects that are everywhere about her, as the winds and weather, the plants and the birds, the fields and streams and woods. It is one of the best resources in life to be able to distinguish the songs and voices of the common fields, and it should be part of the education of every person, and particularly every country person, to have this respite. The making of a garden is much more than the growing of radishes, strawberries and petunias. It is the experiences in the out-of-doors, the contact with realities, the personal joy of seeing things germinate and grow and reproduce their kind."

We personally feel that the woman, much more than the man, is appreciative of this and that perhaps the first sentence should be 'It is as necessary for the man as for the woman.' But at any rate it is so, and the country woman has the God-given opportunity. The change of seasons, the wonderful alchemy of Nature which, when we throw back that of her bounty which we have used and destroyed, turns it to use again to give sustenance to a new crop—all this is far from narrowing; is big in importance for us. The greater chance to enjoy it is the woman's, and most of all, of course, the country woman's. Wouldn't it be well to cultivate this attitude to strike a companionship with birds and beasts and plants? The country would then have a sweeter song and brighter message. This is not a poet's dream; it is truth.



Illustration
is of No. 100

There is nothing more fascinating to the average man or boy than

Tinkering with Tools

and for the man who is really handy with tools a present of one of our Combination Benches and Tool Cabinets for Christmas

will give him more pleasure than anything else you could select. It is a handsome oak cabinet, containing 95 of the finest tools made and when open is a complete bench with vise ready for immediate use.

For one less expert, or for the boy, we suggest one of our smaller cabinets. All tools are the highest grade standard mechanics' tools, arranged in convenient sets for home use. The quality is the same in all. The higher priced cabinets are larger and contain more tools.

No. 47	21 Tools	. . \$ 7.50
" 52	24 "	10.00
" 53	36 "	15.00
" 54	40 "	20.00
" 55	52 "	30.00
" 100	95 "	85.00

We are pioneers in the sale of high-grade tool outfits for home use; every set bears our guarantee of quality.

Order direct (we have no agents) or send for Catalogue No. 2963,

HAMMACHER, SCHLEMMER & CO., NEW YORK SINCE 1848 4th Ave. and 13th St.
HARDWARE, TOOLS AND SUPPLIES

Wanamaker's Christmas Catalog is Ready

Wonderful Christmas merchandise, and 1000 toys and games. Let the kiddies see the pictures and you'll know instantly what will please them most.

Over 50 pages of our General Winter Catalog are devoted to Christmas suggestions. Ask for that, too.

Both are free on request.

Write us today: "Send Christmas Catalog No. 87."

JOHN WANAMAKER, New York

IN HOMES WHERE QUALITY COUNTS
you will find the

BRUNSWICK

**HOUSEHOLD
REFRIGERATING
and ICE MAKING PLANTS**
PERFECT REFRIGERATION
INDEPENDENCE OF THE ICE MAN!

Each plant is designed to meet the requirements of the individual home, and guaranteed to do the work that it is designed for

Our strongest argument is the testimony of BRUNSWICK users.

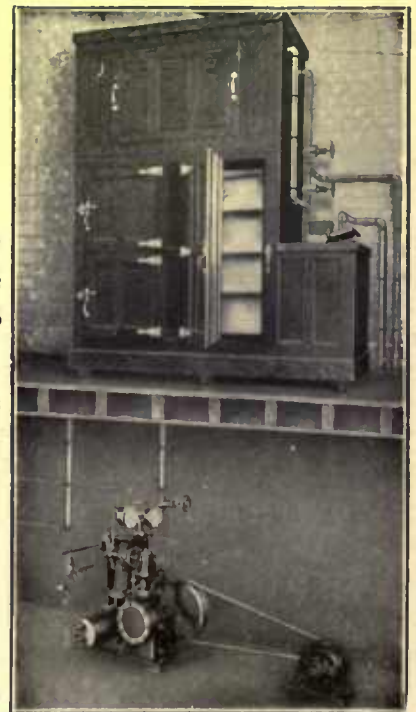
Write for list of installations, and if you are not convinced on the spot, you will at least be interested and the game half won.

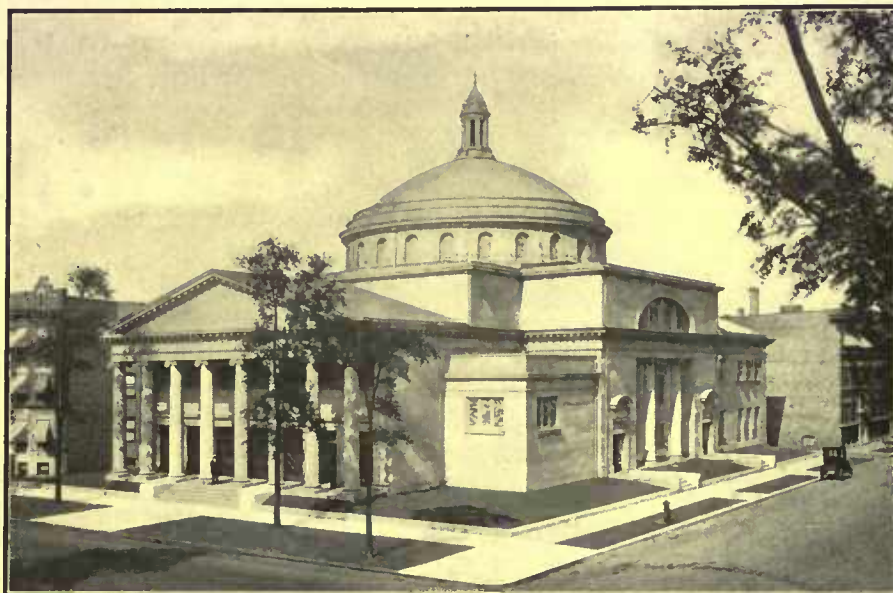
A postal will bring full information.

INVESTIGATE.

RISK A PENNY.

The Brunswick Refrigerating Co.
New Brunswick, N. J. Branch Offices or Agencies in Principal Cities





Asbestos "Century" Shingle Roof—Eighth Church of Christ, Scientist, Michigan Ave. and Forty-fourth St., Chicago, Ill.

Asbestos "Century" Shingles

"The Roof that Outlives the Building"

THE time to think about the durability of your roof is before you put it on—not after the repair bills begin to come in.

Look over all the roofings in the market.

You'll find that only one is truly permanent—Asbestos "Century" Shingles, made of *reinforced concrete*.

As you know, reinforced concrete is absolutely indestructible. Concrete structures have stood centuries of time—the climates of all parts of the globe—the most disastrous fires in the history of civilization.

Many attempts have been made to apply this material to roofing purposes—but without success until the inventor of Asbestos "Century" Shingles used *interlacing asbestos fibers* as a reinforcing.

Asbestos "Century" Shingles are protected by basic patents. They are the only practical roofing made of reinforced concrete in the world today.

You can get Asbestos "Century" Shingles in shapes to suit any architectural style—in several sizes—and in three colors. Newport Gray (silver gray), Slate (blue black) and Indian Red.

Ask your representative roofer about this indestructible roofing—or write us. Send for Booklet C, "Points on Roofing." It will settle your roof problems to your great satisfaction.

The Keasbey & Mattison Company

Factors

Ambler, Pennsylvania

Branch Offices in Principal Cities of the United States

The Naturalization of a City Man

(Continued from page 367)

it might be put into immediate use. In fact there were signs of recent occupation of the woodhouse bunk.

Lute Logan and his man had not been gone many minutes when a solid tread resounded on the veranda, and a hearty knock rattled the door. Hale, hearty, red-cheeked, a little puffy after his walk, a towering framed visitor introduced himself.

"My name—is Hunderson—live—up the road—next house," he informed them, banging a two-gallon jug he had carried down on the floor, and depositing his walking stick with a thwack on the table. "Logan—told me—you'd just come out—from the city; and I thought—maybe a little good cider would go nicely over the holidays. So I took the liberty of dropping in—we don't stand on ceremony out here much you know—and getting acquainted. I'm your nearest neighbor, and have sort of looked out for this place for a good many years."

"Squire" Hunderson—to whom the old title stuck even into a new generation—was a gentleman of the old school. Before taking his leave, some fifteen minutes later, he had won the hearts of the whole family. He also left them the information that the treasurer of the Priestly Bank, an old friend of Uncle Jay Rasmunsen, had kept the place in order and repair since the latter's death.

Supper was soon ready to serve and was not kept waiting. Of course the best things were being saved for the morrow, but genuine hunger is a better appetizer than any Ai sauce, and there was little left over for the dish-washers to remove.

The combined effect of a drive in the exhilarating cold and the full meal was not long in making itself apparent. Heads began bobbing as they all sat before the cheery open fireplace and sleeping quarters were quickly assigned. The old house was warming up quite nicely and drew forth complimentary remarks for the fireplace, until the discovery was made that the sky had clouded over a south wind was blowing up, which had changed the temperature several degrees.

Mr. Mantell, as well as the rest, fell into a sound sleep almost immediately, lulled by the sound, which he had not heard in many years, of rain beating upon a shingled roof. With it, there came to him a strange sense of security, of comfort, of protection and peace, that he had not experienced for a long time.

The morning was as warm as early spring; the snow had largely disappeared, and the brown steaming hillsides looked like March rather than December. Rob, who had brought his skates, was disappointed until the fact that all the ice had been covered with snow was called to his attention. It wasn't a bit like the traditional Christmas day, but they enjoyed it immensely, just the same; particularly Mrs. Mantell, to whom the memories of

Plant for Immediate Effect

Not for Future Generations

Start with the largest stock that can be secured. It takes over twenty years to grow such Trees and Shrubs as we offer.

We do the long waiting---thus enabling you to secure Trees and Shrubs that give an immediate effect. **Price List Now Ready.**

ANDORRA NURSERIES Box CHESTNUT HILL,
H. PHILADELPHIA, PA.

WM. WARNER HARPER, Proprietor

many spring openings on those same hill-sides were recalled vividly. She roamed through the brush and weed-littered hardy garden, with an undefined but ever growing desire springing in her thoughts. The square on the slope south of the house and east of the orchard, where the vegetable garden had been, was still definable. Her thoughts turned back to many long ago Aprils—and then to the one ahead. The vague awakening within her mind began to take more definite shapes.

Mr. Mantell came suddenly upon her sitting on the stone wall under the bare and brushy lilac hedge. He experienced again the feeling of the night before, and it made him almost bashful. He did not even sit down by her.

"Helen," he said, "What do you suppose I've done?"

She had no idea.

"I've hired a man. For once I thought I'd do something on impulse, since you're always advocating it." He waited for her disapproval. "You saw that fellow I was talking with out at the barn. It seems the treasurer of the bank has been letting him stay here in return for looking after the place. He's out of a job and wants to work in return for the place to sleep and eat while we're here. Besides I may send you and the kids up here for a few weeks next summer."

"Oh-oh," she said simply. He could not understand the note of disappointment in her voice.

Late that night they sat alone before the open fire—a real fire in a real fireplace. And their happiness was real. Suddenly she got up, came over and sat down in his lap, and put her arms about his neck.

"Did your new man tell you," began Mrs. Mantel cautiously, for she had been interviewing the new incumbent, "that he had worked for two years on a big seed farm?"

"I believe he said something about it," replied her husband, wondering; "what of it? You can't believe these fellows anyway."

"But you do believe him; I know you do," his wife persisted. "Do you know, I've been thinking today a lot; thinking awfully hard."

"Well?"

"I've been thinking that a certain man I know and have a good deal of confidence in, is going to leave the city and make a living out here in—"

"Impossible, my dear. I'm—"

"No, it is not. You've struck a lucky combination of circumstances. Just think—"

"I have thought. I wouldn't like anything better, but I don't dare take—"

But what's the use of arguing with a woman?—especially when for every reason you want to agree with her. Mr. Mantell's resistance burned out with the fire.

"Well, I'll think it over," he gave in at last. "Maybe—we might try it."

And in the flickering shadowed gloom he drew her close to him, and a very deep, very perfect happiness enfolded them.

NABISCO Sugar Wafers

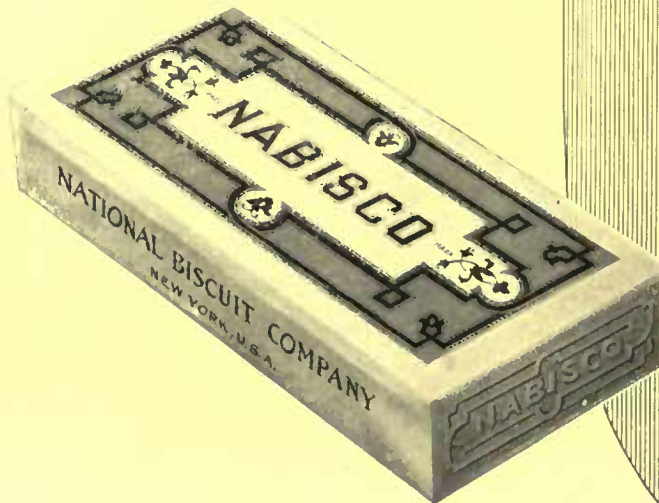
These delightful dessert confections rightly have a place in every holiday repast. Their fragile goodness and delicate sweetness never fail to please. Their varying flavors comport with any dessert, with ices, fruits or beverages.

In ten cent tins

Also in twenty-five cent tins

CHOCOLATE TOKENS—Another dessert confection, with an outer covering of rich chocolate.

NATIONAL BISCUIT COMPANY



A winter garden that you will thoroughly enjoy

A new invention that eliminates all the back-breaking, discouraging drudgery or hot-bed and cold-frame gardening. No covering or uncovering of beds.

Two layers of glass instead of one with a $\frac{5}{8}$ inch layer of dry, still air between take the place of mats and boards. You never have to cover Sunlight Sash.

Flowers and Vegetables when they are luxuries on the market

You can have violets, pansies, lettuce all winter; cauliflower, tomatoes, radishes, etc., ready to act out as soon as the weather will permit.

Get these two books. One is our free catalog; the other is by Professor Massey. It tells how to make and care for hot-beds, what and when to plant. 4c in stamps will bring Professor Massey's book in addition to the catalog.

SUNLIGHT DOUBLE GLASS SASH CO.
944 E. Broadway, : : : Louisville, Ky.



MOTT'S PLUMBING

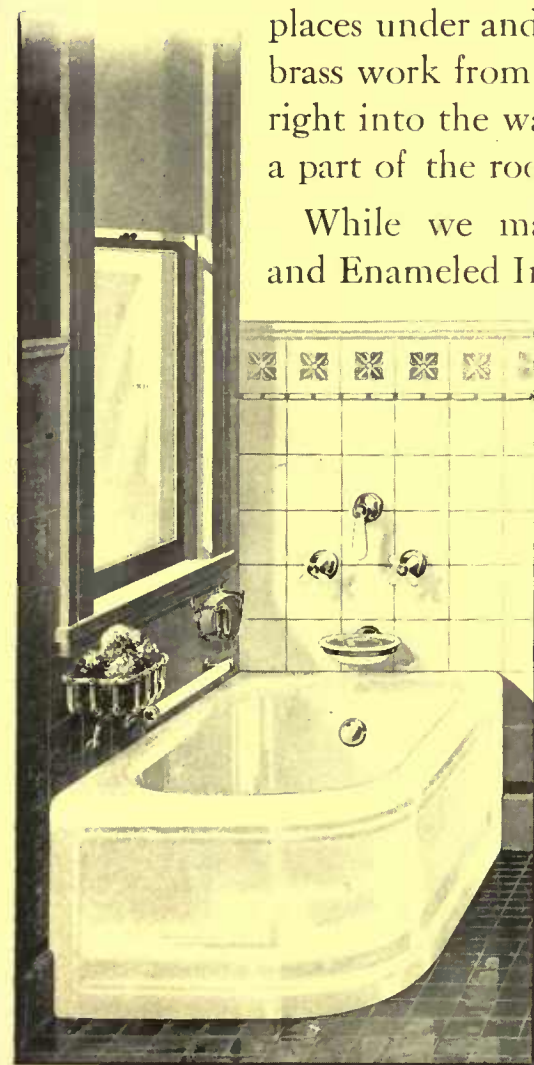
THE modern built-in bath gives more floor space—utilizes an otherwise useless recess or corner—eliminates the hard-to-keep-clean places under and back of the fixture—removes brass work from within the room. It is built right into the wall tiling and floor, becoming a part of the room itself.

While we make both Imperial Porcelain and Enameled Iron built-in baths, we strongly

recommend the Porcelain for its beauty, durability and convenience. The Imperial Porcelain Built-in Bath is glazed inside and out—a damp sponge keeps it spotless.

"MODERN PLUMBING"

Every form of modern bathroom equipment is illustrated and described in "Modern Plumbing"—an 80-page booklet showing 24 model bathroom interiors ranging in cost from \$73 to \$3,000. Sent on request with 4 cents for postage.



THE J. L. MOTT IRON WORKS
1828 EIGHTY YEARS OF SUPREMACY 1911
FIFTH AVE. and SEVENTEENTH ST. NEW YORK

BRANCHES: Boston, Chicago, Philadelphia, Detroit, Minneapolis, Washington, St. Louis, New Orleans, Denver, San Francisco, San Antonio, Atlanta, Seattle, Portland (Ore.), Indianapolis and Pittsburgh.
CANADA: 138 Bleury Street, Montreal

The Making of a Distinctive House

(Continued from page 372)

roses seen against the background of marvelous blues or misty greys of the distant hills.

At the rear of the cottage, which is really the garden front, is a broad terrace, used as an outdoor living room, and furnished with garden chairs. Beyond are flower beds and a garden pool. The crest of the hill is built out fifteen feet to extend this part of the garden. The brick terrace and broad walk with pergola at the end are planned to give a vista of sunlit and shadowed spaces. Brick steps lead down several feet from the pergola to a lawn and tennis court sunken several feet below. On the other side of the garden, near enough to the cottage to insure protection from marauding boys, is the orchard, further shielded by the hedge of shrubs and trees. The fruit trees, small as yet, included varieties of peaches, apples and pears. Below the orchard is a sunken plot of grass bordered with small fruits. Since the street front has an aspect of no particular interest, hot-beds, cold-frames and vegetable garden are given this location and at the front, near the kitchen entrance, is the kitchen court and drying ground.

It is unusual for the home builder to design unaided a complete house and garden scheme. Clear cut ideals and the ability to insist upon their fulfillment are often lacking. But problems of house construction and garden planning, as discussed in modern magazines and books, are of increasing interest to house owners. This cottage, expressing its owner's personality, and carrying out in every detail cherished ideas and principles, is by no means an unknown variety of the American home.



The Smokeless Fireplace and How We Achieved It

(Continued from page 368)

actually happened in my own house!

Three days' work fixed the chimney when we found out, after many months, what to do. All the brick that had been built in for hobs and the raised bed of the fireplace was first chipped out with a cold chisel and mallet. Then the entire front of the chimney the full width of the opening and almost up to the mantel, was cut away, little by little, in the same way. The mantel was a reinforced slab of concrete and the bricks were all laid in cement mortar that was as hard as stone, so we knew the chimney could stand the strain perfectly well. Cutting away the front exposed the tile flue of course, and this was cut off to make room for the throat, and the smoke chamber above.

A groove was cut in the brick 23 inches from the floor on the inside of the jambs and across the back, to receive the project-

SunDialShop

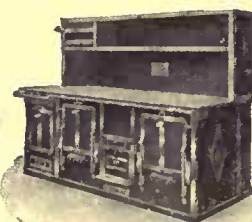
Antiques
Interior Decoration

MRS. HERBERT NELSON CURTIS

22 East 34th Street

NEW YORK CITY

TELEPHONE 2970 MADISON



One of our many models now in stock.

Call or Write for Our Catalog of Ranges and Butler's Pantry Plate Warmers.

A Combination Range for Every Purpose

Good for winter cooking with heating; good for summer cooking without heating—the

Deane Combination Coal and Gas Range

Two ranges in one. Has ovens, gridiron broilers, toasters and all other up-to-date features. Gas and coal can be used at the same time when preparing a big meal; or separately if desired.

Don't buy any range before calling upon us.

Bramhall-Deane Company,
261 W. 36th St., New York City
Cooking Apparatus of All Kinds.

ing edge of the patent cast-iron throat that we had decided to use, and this was pushed back into position from the front. Ordinarily it is simply laid onto the bricks, when the proper height is reached, and the chimney is carried up around it.

With this throat in place the work of reconstruction was actually begun. The front of it formed the lintel to support the brickwork above the opening, and though we were obliged to change our original segment-top opening into a flat top, we were more than pleased with the result. The little recessed panel above the opening was conceived as the work of bricking in the throat was in progress, and was executed as an experiment. When the chimney front was plastered it broke up the surface space so pleasantly that we left it.

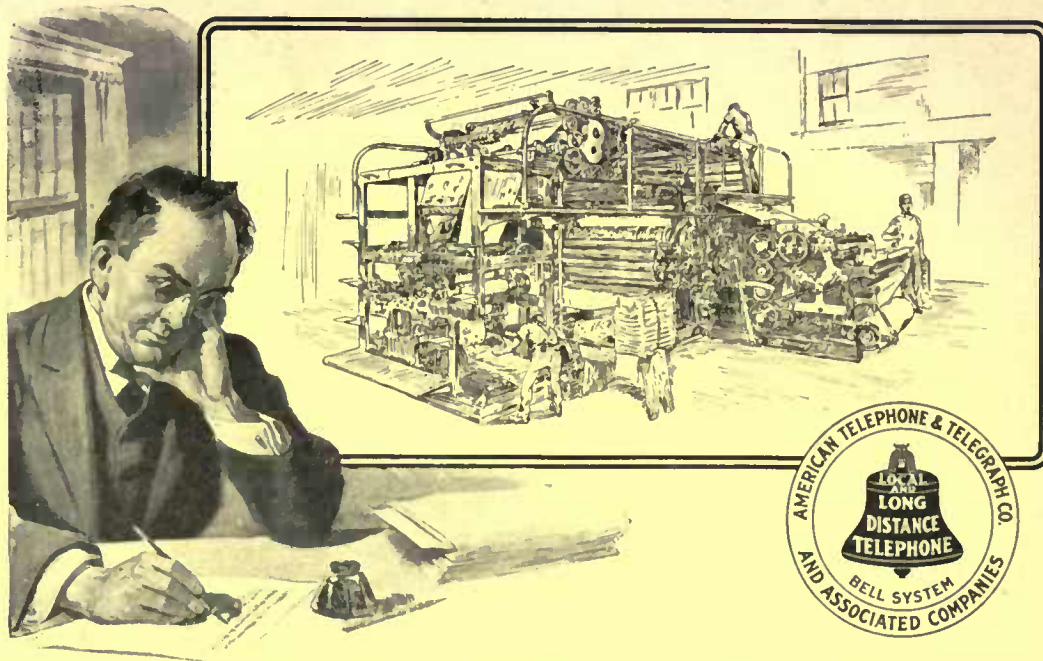
The inside finish from the throat up into the flue, we were cautioned, was of the utmost importance. It proved to be the toughest part of the job, too, for it had to be reached up through the throat after the latter had been bricked in, and the cement had to be worked onto the brick with the bare hands while the operator sat in the fireplace and received showers of it on his head and down his neck. He was a sight—a regular cement man—when he came out, but he bore it bravely and did a fine piece of work.

Every bit of surface from the iron up into the flue—this being the smoke chamber—was made perfectly smooth and worked free from even the slightest irregularities, for even small chunks of mortar, we were told, might act as obstructions sufficient to impair a perfect draft.

Our brick chimney breast was of course ruined, and some sort of finish had to be resorted to, to hide the scars. Tile was considered, but we finally decided to have the sand-finished plaster of the walls carried right down to the fireplace opening and see how it would look. This was, therefore, done, and we were amazed to find our whole room seeming larger than it ever had in the days of our cherished red brick chimney front. This is, of course, easily accounted for, because now there is practically unbroken wall surface over chimney and all, but it is one of those things we never should have known would have this effect, until the knowledge forced itself upon upon us.

All of this was two years ago, and we have ever since realized fully all our dreams of and about the fireplace. It holds its warmth and life through practically nine months of the year, in spite of radiators, for it is all that our fancy had ever painted it as being, and every individual who comes into the house makes straight for it—including the dogs.

I should like to say a word, finally, about building wood fires, and taking care of them and of the fireplace. Do not take out the ashes more than two or three times during the winter and do not take them all out then. They should lie, a soft gray bed, beneath the andirons, to hold heat and to aid in the regulation of the draft underneath the logs. They are indispensable for



For Universal Service

The Press and the Bell System

The power of the individual writer is multiplied by the printing press. In the same way the power of the individual telephone is multiplied by the Bell system. In both cases, increased usefulness comes from progress towards universal service.

By means of the press the knowledge and thoughts of writers are spread throughout the land, maintaining among all the people the common language and the mutual understanding which makes for national co-operation.

By means of the Bell system, each individual telephone becomes connectable

with every other telephone and each unit in the nation is given a personal membership in the most highly developed system of communication that the world has ever seen.

The press prepares people for co-operation; the Bell telephone system enables them to really co-operate. The press educates people separately; the telephone enables them to act upon their mutual knowledge immediately and at any distance.

By co-operation with telegraph and cable systems, universal service for communication is being made international.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY AND ASSOCIATED COMPANIES

One Policy

One System

Universal Service

SAMSON SPOT CORD



For Sash Cord. Will outwear common roughly braided cord or metallic devices many times over. The smooth, even braid minimizes abrasion and prolongs wear.

For Clothes Line. Will not kink, stretch or ravel, or stain the clothes, and is guaranteed to last at least five years even when permanently exposed to the weather. Look for our trade-mark, the Spots on the Cord.

Send for samples. Carried by all leading dealers.
SAMSON CORDAGE WORKS, BOSTON, MASS.

SILVER LAKE Sash Cord

(Name stamped indelibly on every foot)

The man who builds a house without asking about the sash-cord to be used is laying up trouble for himself. Insist that the specifications mention SILVER LAKE A. Its smooth surface offers nothing on which the pulley can catch. Guaranteed for Twenty years.

Write for Free Booklet.

SILVER LAKE COMPANY
87 Chauncey St.,
Boston, Mass.

Makers of SILVER LAKE solid braided clothes lines.



The Practical Workman is Sure to know the Reason Why



U. S. GOVERNMENT REPORT

(Dept. of Agriculture, Forest Service, Bulletin 95,
issued June 30, 1911, says of

CYPRESS:

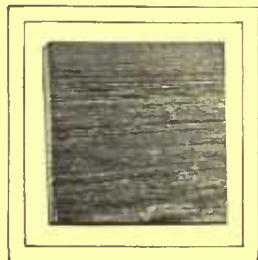


**"AS SIDING IT
PRACTICALLY
WEARS OUT
BEFORE IT
DECAYS."** (From page 44.
U. S. Government
Bulletin 95.)

Same report says "CYPRESS shows paint well and holds it for many years, but lasts a long time without it."

(You know the conservatism of Government Reports.)

Here's a photograph (straight from the wood) of a piece of *Cypress Siding* taken from St. Charles College, La., duly attested in writing by the president, Father Maring. Built 1819—Torn down 1910. **NOT A TRACE OF ROT.** Note that the lower or exposed edge, originally the thicker, has become the thinner by the simple erosion of nearly a century of rains.



CYPRESS SIDING SOUND AS A DOLLAR after withstanding the tempests of a century and willing to start again! 91 YEARS "ON THE JOB," WITHOUT EVEN PAINTING, on a church in use till the day it was razed to make room for a larger building, and the CYPRESS LUMBER COMPOSING IT THEN USED AT ONCE to erect a new gymnasium!

THERE'S INVESTMENT VALUE WORTH WHILE!

WRITE TODAY for **VOLUME ONE** of the CYPRESS POCKET LIBRARY, with **Full Text** of OFFICIAL GOVT. REPORT as quoted above. (Sent FREE PROMPTLY on request.)

"WOOD THAT WILL STAND THE GREENHOUSE TEST WILL STAND ANYTHING." ASK FOR **VOL. THREE** ALSO—FULL OF VITAL FACTS. When planning new improvements or repairs to old ones, just remember—"With CYPRESS you BUILD BUT ONCE."

Let our "ALL ROUND HELPS DEPARTMENT" help YOU. Our entire resources are at your service with Reliable Counsel.

SOUTHERN CYPRESS MANUFACTURERS' ASSOCIATION
1210 HIBERNIA BANK BUILDING, NEW ORLEANS, LA.

INSIST ON CYPRESS AT YOUR LOCAL DEALER'S. IF HE HASN'T IT. LET US KNOW IMMEDIATELY

banking the fire at night or at any time if, for one reason or another, you wish to quench it, and they are needed often to roast chestnuts—in our house at least. Keep them brushed back behind the fire-screen, so that the hearth is clean, but remember that a fireplace is a place in which to burn something, a place for a fire: do have it look as if it served its purpose and served it thoroughly. I saw one the other day, all hard glazed green tile that shone like glass, looking so clean and cold that it fairly screamed to be warmed. Its owner told me they never lighted a fire in it; there seemed never to be time somehow, and anyway it didn't seem worth while, with the steam!

The backlog should be a whole log, not a split piece, and it should lie on the bottom of the fireplace, back of the andirons. In this position it will keep the fire forward where the greatest amount of heat may be realized from it, and it will not burn itself, except as it is charred without actual flame. Such a backlog in the old times when fireplaces were as large as sitting rooms, would last for days, radiating a vast amount of heat before being actually consumed.

The cost of our chimney reconstruction was about \$20 including the cost of the cast-iron throat. This could be lowered to about \$8 or \$10, if the labor were excluded, the throat itself being \$5 or thereabouts. The labor is so simple that an energetic man might very easily do it himself, if he were not averse to getting very much mussed up. It would be a tiresome thing and one requiring patience, but given this nothing else but common sense and a measure of agility are needed.



When and How to Do Winter Spraying

(Continued from page 374)

Winter spraying is done usually in November, or in February or March. A bright fairly warm day, with little or no wind, is not only the most comfortable, but things will go better and results be more satisfactory.

Although this article deals with winter spraying, a word on winter pruning may not be amiss, as the trees should be put into the best of shape before spraying. If you will only take the pains, in winter, to do just the best you can by your trees, you can begin right now to set your mouth for some surprisingly fine fruit.

Pears and plums require practically no pruning; just enough to keep them in even form, and the instant removal of black-knot if any should appear. Peaches will have to be cut out a little to keep them open, and headed low—in the commercial orchards they like to have the lower branches low enough to droop right down onto the ground, when in fruit and thus relieve the trees of their excessive burdens. The apple requires more attention. Young

Landscape Gardening



Prof. Craig

A course for Homemakers and Gardeners taught by Prof. Craig and Prof. Batchelor, of Cornell University.

Gardeners who understand up-to-date methods and practice are in demand for the best positions.

A knowledge of Landscape Gardening is indispensable to those who would have the pleasantest homes.

250 page Catalog free. Write to-day.
THE HOME CORRESPONDENCE SCHOOL
Dept. 226, Springfield, Mass.

There are still some Bargains left for SPRING PLANTING

Send for list

Rose Hill Nurseries

New Rochelle, N. Y.

trees should be cut out to the open-head shape, formed by pruning above an outside eye whenever the branches are cut back. In older trees, all suckers must be kept off, and cross, tangled and rubbing limbs removed; if over an inch in diameter, use a clean-cutting saw and paint over the stumps. March is a good time to do this work, as all winter-damaged limbs may be removed, but November or December will answer as well.

In the small home orchard—and every house with a garden ought to have its few fruit trees—two or three afternoons' pleasant work will serve to put things into first-class shape. The pruning is a matter of a few hours only. An efficient spraying outfit may be had for a few dollars—\$4 to \$10 —(and used for other purposes all the year round). A standard prepared spraying wash or oil is ready for use by simply adding cold water; and from five to thirty minutes, according to its size, will spray a tree effectively. What excuse is there, then, for backward trees and poor quality fruit. You may as well have the extra fancy sort.



The Case for Steam Heating

(Continued from page 384)

The size of the radiator for service in any room is dependent upon its temperature, consequently the larger it is the lower its temperature may be in rendering the service required of it, and the lower its temperature, the nearer it approaches perfection in the dissemination of artificial warmth in the house.

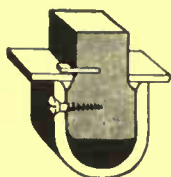
In the modern systems of heating by low temperature steam (vapor) some of the objectionable mechanical features of the more familiar steam-heating systems are eliminated. Air valves are dispensed with, packless valves are employed and noiseless circulation at all times is assured. The fire in the heater will contribute heat to the rooms continuously as with hot water and much of the waste in fuel incident to the pressure method of steam-heating is avoided. This method of steam-heating will cost less in fuel consumption than hot-water heating and a system expressing the best practice in the present state of the art will cost about the same to install as a first-class hot-water heating apparatus.

This article being in the nature of a comparison of different systems of heating and not a technical exposition of the methods of arriving at the proper size of the heater, radiator, pipes, etc., it presupposes that a general statement of the importance of moderate temperatures of the radiators, indorsed by medical and other scientific authority, will sufficiently indicate to the house builder that a clause limiting the temperature of the radiators may be inserted in the contract for the heating apparatus.

Heating apparatus in the house makes



This house is fully described and illustrated in our catalog.



This is the U-Bar. The Bar that makes U-Bar Greenhouses the famous Greenhouses they are.

about what it will do for the spring and summer beautifying of your grounds, and having them strong and sturdy to set out the first warm days.

Then in addition to all this, there is much, very much, to be said about the kind of house you build. In fact, a good deal of your success depends upon it. For this reason, we want you to send for our catalog, so you may see how entirely different U-Bar Greenhouses are from any other greenhouses. Different in attractiveness, durability, cost of maintenance and quantity and quality of blooms they will produce for you. Send for the catalog.

YOU may think that a greenhouse is just a greenhouse, and that's all. You are wrong, way wrong; it is an indoors garden spot. Simply because the garden is inclosed in glass, and the rows and beds of flowers are elevated on benches, so you can care for them without the backaching bending over, is it any less a garden? Certainly not—in fact it is more so, for you can work in it any day, during any weather, any time of the year.

Neither is there any reason why you can't have old-fashioned flowers galore from your garden under glass, as well as the lovely rose and cheery, lasting carnations.

Then there are the expansive pleasures of a greenhouse—by expansive we mean the things it makes possible. The conservatory-living-room, for example, such as is illustrated below. What a joy spot it is! How perfectly delightful to have such a retreat of comfort, where you can always have your flowers about you. Think how satisfying to turn here when things have been "sort of on edge all day." What a choice spot in which to serve the friendly cup of tea or enjoy a smoke.

But what is the use of picturing it to you further? Its possibilities are endless. And it is these things that one of our greenhouses makes practical. Practical because from it you can keep your conservatory-living-room continually supplied with a profusion of fresh blooming plants—not cut flowers merely, but plants in all their natural, growing beauty.

So much for the indoors advantages of owning a greenhouse, and nothing said



Could anything be more charmingly inviting than this conservatory at Lenox, Mass.? It is constantly replenished with fresh flowers and plants from the greenhouse.

U-BAR GREENHOUSES

PIERSON U-BAR CO

ONE MADISON AVE. NEW YORK

CANADIAN OFFICE, 10 PHILLIPS PLACE, MONTREAL

WHITTALL'S ARABIC

WHITTALL'S
THE MARK OF QUALITY

THE DANCERS OF THE ORIENT INVARIABLY chose a soft rug upon which to display the intricate steps and lithe motions of the Eastern dances.

¶ We, too, need rugs—rugs of artistic Oriental designs and soft Oriental colorings—rugs that will sink harmoniously into the color scheme of our rooms—rugs that we can live with contentedly.

¶ In the

Whittall Arabic Rug

you have a rug of wonderful texture, the soft, high, resilient pile sinking luxuriously under the foot. In design we offer you close imitations of beautiful old Oriental masterpieces worked out in their rich, mellow colorings. The length of pile and the use of splendid material insures you great resistance to wear, while our dyes are subjected to rigid tests in our laboratory before use.

¶ These rugs were primarily made to fill the need of those in search of the artistic and beautiful as well as durable, who can not afford a high-priced Oriental. The Whittall method of manufacture, taking advantage of each and every mechanical improvement, is able to produce a splendid rug at a moderate price.

¶ The name "Whittall's" woven into the back of every rug and yard of carpet is your guarantee of the manufacturer's high standard of perfection.

¶ Send for our booklet

"Oriental Art in American Rugs"

with its splendid descriptions of Oriental design and its beautiful plates of Whittall reproductions.

We will send it free.

M. J. WHITTALL

DEPT. S

WORCESTER, MASS

ESTABLISHED 1880

IRON AND WIRE FENCES

Fences of all descriptions for City and Suburban Homes. Write today for our Loose Leaf Catalog, stating briefly your requirements.

Fence Department

AMERICAN WIRE FORM CO.

100 Church Street

NEW YORK CITY

INTERIOR DECORATORS

Color Schemes Planned and Executed
Stencil Work and Applique Work : :
Samples and Estimates on Request

BOWDOIN & MANLEY

546 Fifth Avenue

New York



HAVE ELECTRICITY IN YOUR COUNTRY HOME

Install an Alamo-Westinghouse electric lighting set in your house. These little plants are safe, durable, economical and do not require the services of an engineer. We also install Complete Water Systems of all kinds. All of our apparatus is guaranteed. Write for our booklet entitled "Electric Light and Power for Country Home and Farm."

ALAMO MFG. CO. - - - Hillsdale, Mich.
Eastern Representatives, OTIS & WELLS, Electrical Engineers, 2 Rector Street, New York City,
CHAS. PFAU, Bourse Bldg., Philadelphia.

its appeal to us (or does not) in very cold weather through a sixth sense of its friendly warmth. Of course nothing in the way of artificial warming approaches the open wood fire in its appeal to that sense. This luxury in our climate contributes its warmth by about 90 per cent. of radiant heat. The radiator produces a genial 45 per cent. of radiant heat and the register gives no radiant heat at all but just *hot air*.

The radiator is a useful friend in taking up and warming the cold currents of air in the bay windows, under the stair wells and near the outer doors.

"A radiator seems to me

The kindest reptile that can be.

Its cobra coils of golden art

Entwine the cockles of my heart.

I do not blame poor Eve at all;

For it was very cold—that Fall;

Of course, she took the serpent's hiss

For Steam heat's everlasting bliss."

—Southern Architect and Building News.



Feeding the Birds in Winter

(Continued from page 387)

explanation, then sped within the back door to her crying children.

Spilly sat on the balcony stem outside, his vigil, his labor, his heartaches suddenly relieved; his little head drooped and nodded in the exhaustion of sleep.

As the children grew older they would hang out the front and back doors squawking for food and almost tumble out before their parents could bring it. This nearly frightened Tildy to death but I really believe Spilly Willy took pride in it, for one day while Tildy was off foraging he deliberately sat on the balcony and dared little Billee to come clean out. Billee did and so did Sally and Tildy, Jr., and Beatrice and Harold and little Pearl—all six just fluttered, fell and spilled out front and back doors and made off for inaccessible foreign parts.

Then Tildy returned and was flabbergasted; she accused Spilly Willy, he denied it and I didn't tell on him. There was pandemonium, wifely shrieks and flutterings, then all of a sudden both laid all the blame on *me*, and I was made to understand that as long as I was responsible for the breaking up of their home it was up to me to search for the children.

Of course, they had gotten under our porch and neighboring porches, down cellar and in every other difficult place, where I bumped my head and skinned my back nearly reaching them, only to have the wretched little things flutter farther away. After an hour's ceaseless pursuit I eventually landed the entire six babies, placed them unhurt on the boughs of a sumach and delivered myself of an oration to the parents, with which I forthwith washed my hands of the entire business.

Locking the Windows

THE necessity of going about the house at night to see if the windows are safely locked, can easily be obviated by the use of the clever arrangement of the lock and lower sash-lift at the bottom of the lower sash. This consists of a metal finger-hook for raising the sash. There is, however, a drop hook as well. A separate plate, with a hole large enough to accommodate the drop hook, screws into the window-sill. The sash-lift and the hook-locking device work from a center pivot, and the act of closing the window forces the edge of the drop-hook over the edge of the lock-plate on the sill, thus clamping the window on the "hook and eye" basis.

Where the bedroom windows are on the ground floor or other exposed place, the "ventilating lock" is a very desirable addition to one's comfort. This is a metal device applied to the side of the window, allowing the upper sash to be dropped a required distance, when the night-lock is applied. Bolts are also made for the purpose, and it is merely a question of personal preference as to which is the most desirable; the ventilating lock, however, being more practical as it is self-applying.



Economy in Gardening

SO far from expecting to make any profit from their gardens, many would probably be satisfied if they could make them self-supporting. We are all agreed that the pleasure afforded by a well-kept garden is worth a good deal of trouble and expense; indeed, it can be looked upon as a necessary expenditure, inasmuch as it is an indispensable factor in maintaining the value of an estate, but it is very certain that the study of the accounts of a number of important gardens would reveal the fact that good and bad management result in a very considerable difference both in outlay and returns.

Economy in gardening is largely a matter of making the best of the site. Is it not really better to make the most of natural advantages than to pit one's ingenuity and purse against nature? Yet there are people who must cultivate roses where all the soil for them has to be brought a great distance, and others who must needs make a lake on an unsuitable site, or whose taste is all for plants which require constant replacement. Fortunately, in glasshouse gardening it is quite easy to economize. Thus the maintenance of a stove or forcing houses cannot be termed a necessary expense, and the conventional summer bedding out is an item which might certainly in some instances be advantageously improved away. Where room is available a saving could be accomplished by doing more home propagation. Professional gardeners say there are not many employers who have not got economy very much in mind. The pity of it is that

FLINT'S FINE FURNITURE

GIFTS BEARING THE FLINT TRADEMARK

Attached to every article in our Holiday Exhibit is the Flint Trademark carrying with it our inviolable guarantee of superior quality and artistic distinction.

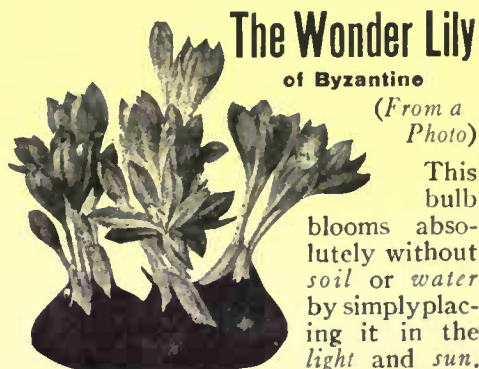
The least expensive pieces reveal exquisite care in every detail of construction, harmony of beautiful line and purity of decoration—attributes of FLINT'S FINE FURNITURE especially appreciated by those who desire Holiday Gifts of permanent value.

OUR TRADEMARK AND
SEVENTY YEARS' REPUTATION
IS YOUR GUARANTEE



GEO. C. FLINT Co.

43-47 WEST 23rd ST.
24-26 WEST 24th ST.



The Wonder Lily of Byzantine

(From a
Photo)

This bulb blooms absolutely without soil or water by simply placing it in the light and sun.

A Unique Christmas Gift

for your friends. Start the Bulb 3 or 4 weeks before Xmas—placing it in a glass, china or brass bowl, and the exquisite rosy blossoms will appear, forming a living fragrant Bouquet. To watch this mysterious flowering delights grownups, children and invalids. Don't fail to send for a bulb.

	Each	3	12
Large Bulbs	\$2.00	\$5.50	\$17.75
Xtra Monster Bulbs	.25	.70	2.75

Price Includes Delivery.

Address: H. H. BERGER & CO.

Dept. H. 70 Warren St., New York.

The Regular Dunning Boiler

FIRST AID TO
WINTER COMFORT

Soon the weather will be cold and soon a good heating plant will be one of the most welcome inmates of your home. With the DUNNING system of house heating you are provided reliable, uniform warmth throughout the house, and not only do you get a steady heat day and night, but you do so with the greatest fuel economy.

Have you installed the thorough heating system you promised yourself last winter? Now is the time if you haven't.

Study the cut, note the long fire travel and perfect construction, then write for our literature, a treatise on the heating question well worth while.



New York Central Iron Works Co., 5 Main St., Geneva, N. Y.



Tiled floors and walls in the kitchen

That cool, clean, inviting effect noticed so much in the kitchens of Europe, is due to the plentiful use of tile. Tile practically lasts forever, is absolutely sanitary and lends itself to the most inviting color schemes. Americans do not use it because they have a false idea of its cost.

Our booklet, "Tiles for the Kitchen and Laundry," corrects this false idea and tells some wonderfully interesting things about tile for both sanitary and decorative purposes. We have three other booklets, "Tile for the Bathroom," "Tiles for Fireplaces," "Tiles on the Porch Floor," which we send free to home builders. You would do well to read them before perfecting your plans.

The Associated Tile Manufacturers
Room 2, Reeves Building, Beaver Falls, Pa.



Interior Decorations

THE furnishing of a house should be as carefully planned as the house itself.

Wall coverings, hangings, rugs, furniture, etc., selected to form an harmonious color scheme for either the whole house or single rooms.

LAMP AND CANDLE SHADES

Out of town orders attended to carefully and promptly.

Miss Throop & Miss Veerhoff
37 East 60th Street, New York

RARE AND ORNAMENTAL PLANTS



Alocasia Zebrina

We can supply everything for the Greenhouse as well as decorative trees and plants.

It will pay you to visit our nurseries or send for descriptive catalogue which is sent Free.

COMPETENT GARDENERS and ASSISTANTS

Any lady or gentleman requiring their services can have them by applying to us. No fees. Please give particulars regarding place.

Julius Roehrs Co. Exotic Nurseries **Rutherford, N. J.**

their efforts are often misdirected, for he who knows little of gardening is unlikely to be able to economize with good effect. The usual mistake is to seek to effect a considerable saving in the cost of labor. But by doing this the garden is sure to get out of hand, and above all things it is fatal to try to save by employing cheap incompetent men.

W. R. G.



California Notes

ON February sixth I found the purple-crimson tips of our very earliest Clematis, the "Scarlet Trumpet," *C. Sanguinea* or *C. Coccinea Sanguinea*, just peeping out of the ground. The old vine dies back to the ground each year, but the strong young shoots grow rapidly, and before they have attained a height of three feet the buds appear at the leaf axils, and while the vine climbs steadily skyward the buds grow brighter and more showy.

The small coral blossoms never open out flat like other Clematis, but retain the flagon shape of the bud, only opening at the tip, absolutely unlike any other Clematis I have seen, dainty, fairy, attractive bits of scarlet coral, standing up stiff on woody stems and holding much of honey in their depths. The humming-birds visit them the first thing every morning and many times through the day, making the delicate drapery of vine over my bedroom window a constant delight.

The vine never grows heavy or thick, being a delicate ornament rather than a shade. The seed clusters are as ornamental as the flowers, of soft, pale green, and most curiously twisted and curved. It grows readily from seed, but the seedlings are slow of growth, when two years old only attaining a growth of about twelve inches.

The mountain clematis, *C. Montana*, is the second one to bloom here. While I find it, and the later and more showy ones, very attractive, still nothing is more charming than the *Sanguinea*, blooming as it does from earliest springtime until fall, all summer long withstanding the hottest sunshine, still growing and blooming and displaying

LILLIE F. SHAW



The Sprouting Stage

I HAVE found the sprouting stage of my plantings accompanied with the greatest dangers to the little seedlings. Last year, in order to have them more fully under my care, I planted corn and lima beans in small boxes of damp sand; when they had come up and seemed sufficiently hardy I put them out in the ground and discovered that such fostering seemed to make them immune from the rot and other enemies that blast the life of so many baby plants in the raw chill of early spring.

A. W. D.

NEW YORK BELTING & PACKING CO. LTD

ORIGINAL MANUFACTURERS

INTERLOCKING RUBBER TILING.

**IT IS THE BEST FLOOR MADE
FOR CHURCHES, SCHOOLS, BANKS, PUBLIC BUILDINGS,
THEATRES AND PRIVATE RESIDENCES, BEING SANITARY,
NON-SLIPPERY, SOFT AND COMFORTABLE TO THE TREAD,
BEAUTIFUL IN COLORS AND DESIGNS AND DURABLE.**

<p>New York, N. Y., 91-93 Chambers Street Chicago, Ill., 150 Lake Street Philadelphia, Pa., 118-120 North 8th Street San Francisco, Calif., 129-131 First Street</p>	<p>Pittsburg, Pa., 933-935 Liberty Avenue St. Louis, Mo., 218-220 Chestnut Street Portland, Ore., 40 First Street Boston, Mass., 232 Summer Street Indianapolis, Ind., 207-209 S. Meridian St. London, England, 13-15 Southampton Row Spokane, Wash., 163 South Lincoln Street</p>
--	--

Keeping Cut Flowers Fresh

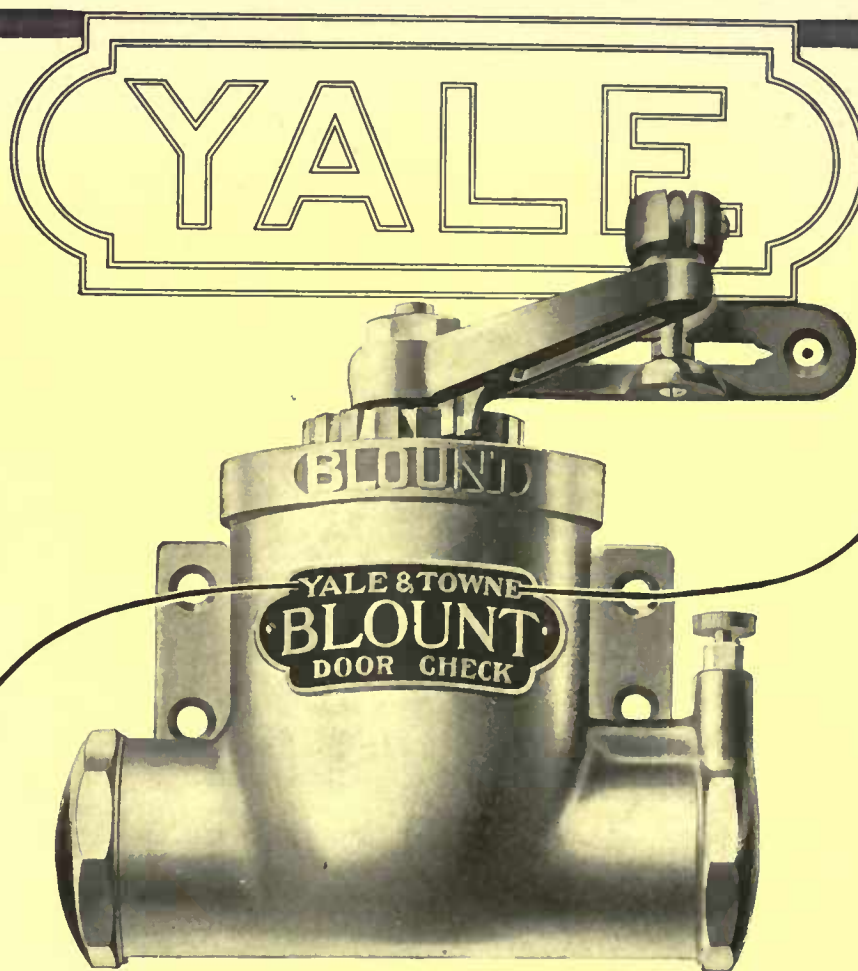
ALL decay is caused from some sort of bacteria, and by using antiseptic preparations and cleanliness we can delay the process. In the case of cut flowers we find that they will keep fresh longer if gathered at night and the next morning have the stem washed in warm water and a quarter of an inch cut off with a sharp knife. They may then be put in a vase of water and be taken out and washed and trimmed again every morning for several days before they show signs of decay or wilting. If it is desired to send flowers to a distance they may be gathered at night and treated in this way the next morning, then wrap each stem in cotton and oil paper. A small potato stuck on each stem will furnish sufficient moisture to keep a flower fresh for several days while in transit.



How to Make Your Suburban Home a Success

THE man of moderate means as well as the man with millions has a desire for the scenic beauty of the country, which finds expression in homes ranging all the way from a lot with a few flowers, to the country estate. Each in its way serves to gratify this desire. By successful administration let us mean that the lawns are well kept, the walks and drives are in order, the shrubs and flower beds and the garden are free from weeds. First of all, have your residence and out-buildings properly located. There is nothing that adds so much beauty and at the same time cuts down the expense of a place like an economic arrangement. Many a man has become disgusted with his place because it never seemed to be in order. You have seen many places where the whole arrangement reminded you of a horticultural junk shop without shape or system. Vegetables and flowers growing together, the lawns cut up with figure shaped flower beds as crosses, stars, etc. Perhaps you will find board boxes or wooden edges to the beds. All these things tend to lessen the character of the place. This patchwork method is always the most expensive and totally lacking in taste or art. Flower beds edged with field stone are in bad taste and never in keeping with any design of a bed. By far the best way to make a flower bed is to cut out the shape and size out of a well-kept sod, letting the dirt come almost flush with the top of the sod. Good taste demands no greater demarkation of the bed and lawn than this. It is much the simpler way and there is nothing about it to become dilapidated.

Perhaps the most important of all is the lawn. We all enjoy a wide stretch of green. Make your lawns seem as large as possible. Do not cut them up with beds of flowering annuals, they have no place on a lawn, where nearly everything like



Haven't you caught cold because some door wouldn't stay shut?

THE Genuine Yale & Towne Blount Door Check is the standard *door closing* device of the world. It closes doors gently, quickly, silently.

How about applying one on your

Front Entrance Door Door to Rear Hall
Outside Kitchen Door Nursery Door
Side Entrance Door Den Door

Blount Door Checks are almost human: and they never forget.

They may also be had on request furnished with attachment for holding the door open at any desired position.

They are one of the world's greatest mechanical contributions to the comfort and satisfaction of people who use doors. In buying your door check insist that it bears the name Yale & Towne.

Made in several sizes—for all weights of doors—your hardware dealer can supply you.

The Yale & Towne Mfg. Co.

The Makers of
Yale Products

Local Offices:
Chicago, 74 East Randolph St.
San Francisco, 706 Phelan Bldg.

9 Murray Street
New York, U.S.A.

Beautify Lawn or Terrace by sowing the Wizard Lawn producer **KALAKA**

Comes up anywhere, all it needs is soil and moisture. Seed and fertilizer scientifically mixed to produce marvelous results. Hundreds praise its great efficiency. Cheaper, goes further than common seed. Ask for FREE Booklet, "How to Make a Lawn."

The Kalaka Company 816 Exchange Ave. Chicago, Ill.
Union Stock Yards.



CALIFORNIA PRIVET

Best of the Hedge Plants—an ideal hedge for lawn purposes. A quick grower. No thorns. Easily trained. California Privet is generally known and universally popular. Particularly suitable for private grounds. Perfectly hardy and almost evergreen. Large stock. Prompt shipments. Plant this Fall and gain a season. Write to-day for Free Catalogue of Trees, Vines, etc.

ARTHUR J. COLLINS
Box Y, MOORESTOWN, N. J.

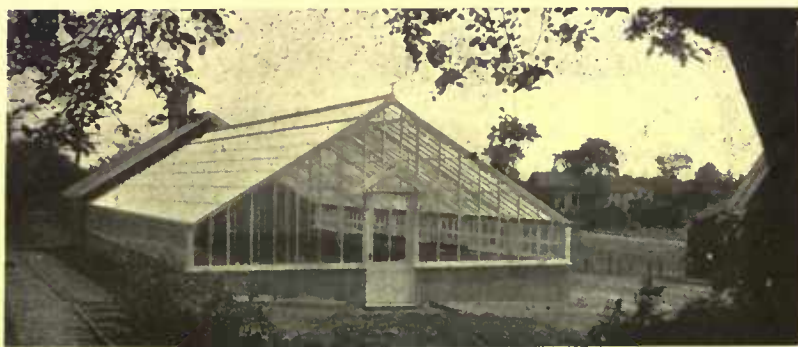
NO DELAY TO GET THE CLOTHES DRY ON WASH DAY

When using the "CHICAGO-FRANCIS" Combined Clothes Dryer and Laundry Stove. Clothes are dried without extra expense, as the waste heat from the laundry stove dries the clothes. Can furnish stove suitable for burning wood, coal or gas. Dries the clothes as perfectly as sunshine. Especially adapted for use in Residences, Apartment Buildings and Institutions. All Dryers are built to order in various sizes and can be made to fit almost any laundry room. Write today for descriptive circular and our handsomely illustrated No. 12 catalog. Address nearest office.

CHICAGO DRYER CO. or SHANNON MFG CO.

630 So. Wabash Ave. CHICAGO, ILL.

124 Lexington Ave., NEW YORK CITY



A Tryout Greenhouse

WE call it a "tryout" because the owner has rather extensive ideas of the size of house he will eventually have, but he had us build this small one for him as a tryout to prove to himself that a greenhouse gives all the fun and satisfaction we say it does. It is so located and arranged that it can be enlarged economically and lose none of its attractiveness. A plan that is planned ahead, as it were.

Perhaps you would like a tryout house?

If you write us at once we will send you a catalog by return mail and by a little extra effort your house ought to be up in six weeks or so.

Hitchings & Company

Spring Street
Elizabeth, N. J.



WHEN IN BOSTON STAY AT THE COPLEY SQUARE HOTEL

HUNTINGTON AVE., EXETER AND BLADGEN STS.

A high-class, modern house, intelligent service, moderate prices, pleasant rooms, superior cuisine. Long distance telephone in every room.

Ladies traveling alone are assured of courteous attention.

AMOS H. WHIPPLE, PROPRIETOR.

SUN DIALS

Any Latitude

E. B. MEYROWITZ, 101 East 23d St., New York
Branches: New York, Minneapolis, St. Paul, London, Paris

A Beautiful Illustrated Book-let, "WHERE SUN DIALS ARE MADE," sent upon request. Estimates furnished.

PROTECT Your floors and floor coverings from injury. Also beautify your furniture by using Glass Onward Sliding Furniture and Piano Shoes in place of casters. Made in 110 styles and sizes. If your dealer will not supply you Write us—Onward Mfg. Co., Menasha, Wisconsin, U. S. A. Canadian Factory, Berlin, Ont.



LEAVENS COTTAGE FURNITURE



IT is far from our intention to create the impression that our stock is high priced. It is, however, exclusive in design, and it is also true that we have had the patronage of the most discriminating and particular people in all parts of the country.

The reputation of our furniture has been built upon distinctive features, such as, the simple artistic lines of our designs, solid construction, and a variety of custom finishes.

Our cottage furniture is especially adapted for both Shore or Country houses where a simple, harmonious and artistic effect is desired, conforming with the surroundings, and yet not sacrificing one's comfort.

Shipments are carefully crated, insuring safe delivery.

Send for complete set of over 200 illustrations.

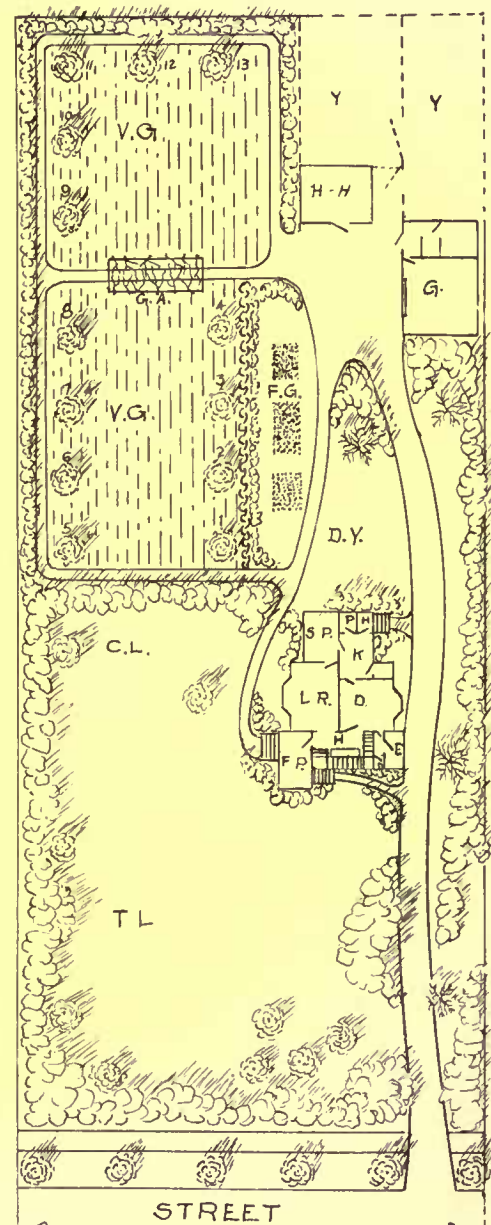
WILLIAM LEAVENS & CO.

MANUFACTURERS

32 Canal Street - - Boston, Mass.



the trees and shrubbery borders are perennial. Aside from cutting up the lawn, their usual early autumn decay make the lawns look unsightly. There is a great deal of beauty to the angular shape of the shrubs when the leaves have fallen. The bare forms of the trees against the autumn sky are picturesque indeed; but a bed of dying flowers has nothing in com-

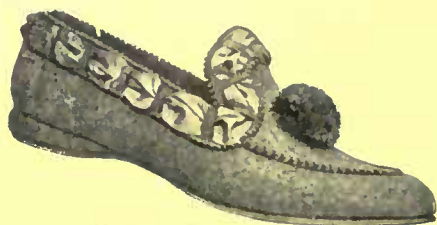


An acre lot planned to give individuality to the grounds and giving most attention to the place where most time is spent

mon with these. Keep the lawn centers open, they are interesting and cheerful.

Place your residence and out-buildings so they can be reached in the quickest and most natural way, keeping in mind the decorative individuality of your grounds. You will be much on your front porch and in your living room, and it is from these points, to a large degree, that you will enjoy your open lawns. Your out-buildings should be of easy access from your residence, but screened off as much as possible with trees and high growing shrubs.

COMFY Footwear



The Peerless

A Comfy-Felt slipper, trimmed with ribbon in colors to match. Very handsome and of course very "comfy."

Women's, Black, Red, Brown, Light Price
and Dark Gray, Purple, Wine, Old
Rose, Lavender, Taupe, Pink, Wis-
taria and Light Blue..... \$1.50
Delivered



Picture Comfys For Children

Dutch Kids and Rabbit.....Brown, Blue
Clown.....Red, Pink, Light Blue
Misses' \$1.25, Child's \$1.10
Delivered



The Tailor-Made

Women's, Navy Blue, Light and Dark Price
Gray, Red, Wine, Brown and Black... \$1.25
Men's, Red, Brown, Navy Blue, Dark Gray, \$1.50
Delivered

Send for our handsome illustrated Catalogue No. 46,
showing many new styles.

Dan'l Green Felt Shoe Co.

110-112 East 13th St., New York

Now let us study this design of an acre lot with reference to all these details. Your place or the place that you may have in mind may not be like this one in shape or extent, but nevertheless it will lend itself to this style of treatment, which is our main object.

The drive, which is both walk and drive, enters from one side and the out-buildings are reached without cutting across the main lawn. In going to or leaving your garage (G) you pass your residence without going some roundabout way. Your residence is so located that you have the best possible view of your lawns from your front porch (F. P.) and your living room (L. R.), while at the same time your out-buildings are so close that you experience no inconvenience. The residence must, to a very large degree, be considered as being diagrammatic, for in this matter individual taste plays so important a part, that at best suggestions are only safeguards. There are some features of a suburban home that make it enjoyable. By means of our sketch let us study some of these features. The summer porch (S. P.) is fitted up with removable screens and used for a summer dining room. This porch is close to the pantry (P). Through the kitchen hall (H.) you have easy access to the drying yard (D. Y.) and the vegetable garden (V. G.). The front entrance is by way of the front porch, or you may use the carriage entrance (E.) at your discretion. The living room is a good size and through a bay overlooks a wide stretch of lawn. These details are important and must be worked out carefully, for they have much to do with the success of your home. The residence and home grounds are correlated and must be worked out together. (C. L.) and (T. L.) are croquet and tennis lawns.

The garage (G.) and hen house (H. H.) are so located that the yards (Y.) are together with only a fence between them, but connected with a wide gate so the two yards can be thrown into one if you have no occasion to use them separately, thus giving you a larger hen park. The out buildings are located closely to the garden, so that all manure and compost can easily be drawn out on the garden at the proper time, and which aids very materially in making your garden a success.

The garden contains thirteen fruit trees. 1, 2, 3, 4 are Early Richmond, Black Tartarian, Elkhorn and May Duke cherry trees. 5 and 6 are summer apples, Red Astrachan and Yellow Transparent. 7 and 8 are autumn apples, Fameuse (Snow apple) and Duchess of Oldenburg. 9 and 10 are winter apples, Baldwin and Jonathan. 11 is Hyslop's crab apple. 12 and 13 are Kieffer and Seckel pears. Small fruits, such as black and red raspberries, gooseberries and currants, are planted in variety on the outside of the garden walks. The grape arbor that covers the center garden walk (G. A.) is covered with Concord, Delaware and



Add to your own pleasure this year by presenting a gift that conveys the value of intrinsic merit as well as the thought of personal sentiment.

Globe-Wernicke Sectional Bookcases

in Sheraton and other art styles of real mahogany and beautifully figured oak are always acceptable as holiday gifts, being as decorative as they are useful in the home.

Art catalogue containing many clever suggestions for Individual Christmas Libraries mailed on request. Also copy of Hamilton W. Mabie's new booklet "The Blue Book of Fiction." Such publications will help you solve the holiday problem. Prompt Shipments and Freight Prepaid Everywhere.

Address Dept. H. G.

**The Globe-Wernicke Co.,
Cincinnati**

Branch Stores:

New York, 880-882 Broadway Boston, 81-83 Federal St.
Philadelphia, 1013-1014 Chestnut Street
Washington, 1218-1220 F. Street, N. W.
Chicago, 231-235 So. Wabash Avenue
Cincinnati, 128-134 Fourth Avenue, East

Smoky Fireplaces Made to Draw

Your Particular chimney problem studied by experts, and estimates given without charge. The work is undertaken with this understanding: We will not accept payment unless successful. Kitchen ventilating systems, preventing cooking odors.

FREDERIC N. WHITLEY Engineer and Contractor
208 Fulton Street, Brooklyn, N. Y.



**THREAD
and
THRUM
RUGS 16 FEET**

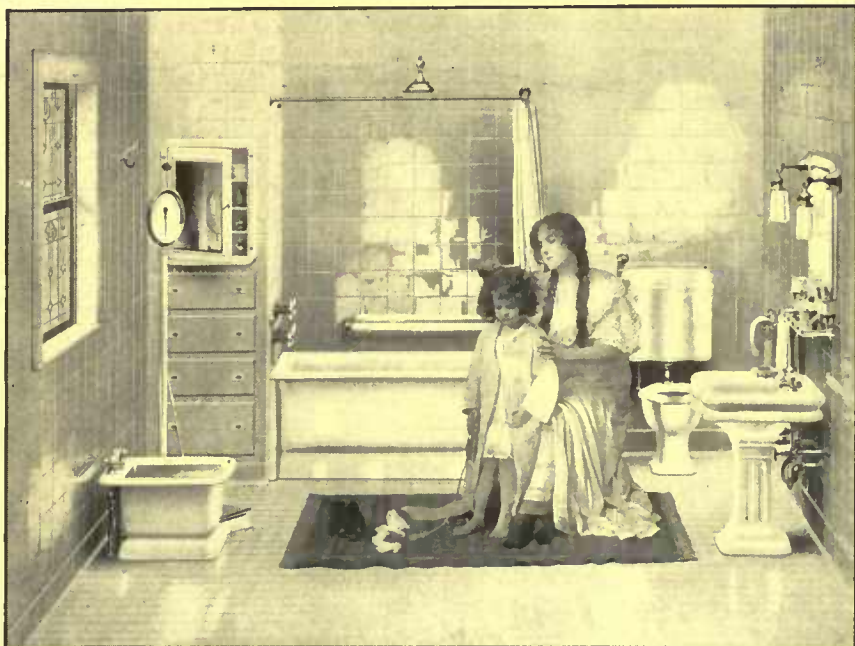
are made seamless, of pure wool or camel's hair, in any width up to and in any length, color or combination of colors, 65 regular shades—any other shading made to match.

Send for color card and name of nearest dealer.

Thread & Thrum Work Shop
Auburn, N. Y.

"You choose the colors, we'll make the rug."

"Standard" GUARANTEED PLUMBING FIXTURES



YOUR BATHROOM equipment should be selected with the same thought as you give to the design of the house itself. Sanitary assurance, attractive designs and long service are all serious considerations. Every bathroom should be beautiful as well as serviceable. No equipment offers so complete and satisfactory a solution of every phase of the bathroom problem as "Standard" plumbing fixtures.

Genuine "Standard" fixtures for the Home and for School, Office Buildings, Public Institutions, etc., are identified by the Green and Gold Label with the exception of baths bearing the Red and Black Label, which, while of the first quality of manufacture, have a slightly thinner enameling, and thus meet the requirements of those who demand "Standard" quality at less expense. All "Standard" fixtures with care will last a lifetime. And, no fixture is genuine unless it bears the guarantee label.

Send for a copy of our beautiful catalog "Modern Bathrooms." It will prove of invaluable assistance in the planning of your bathroom, kitchen or laundry. Many model rooms are illustrated, costing from \$78 to \$600. This valuable book is sent for 6 cents postage.

Standard Sanitary Mfg. Co.

Dept. 40

PITTSBURGH, PA.

New York . . . 35 W. 31st Street
Chicago . . . 415 Ashland Block
Philadelphia . . . 1128 Walnut Street
Toronto, Can. . . 59 Richmond St., E.
Pittsburgh . . . 106 Sixth Street
St. Louis . . . 100 N. Fourth Street

Nashville . . . 315 Tenth Avenue, South
New Orleans, Baronne and St. Joseph Sts.
Montreal, Can. . . 215 Coristine Bldg.
Boston . . . John Hancock Bldg.
Louisville . . . 319-23 W. Main Street
Cleveland . . . 648 Huron Road, S. E.
Hamilton, Can. . . 20-28 Jackson St., W.

London . . . 53 Holborn Viaduct, E.C.
Houston, Tex. . . Preston and Smith Sts.
San Francisco, Metropolis Bank Bldg.
Washington, D. C. . . Southern Bldg.
Toledo, Ohio . . . 311-321 Erie Street
Fort Worth, Tex. . . Front and Jones Sts.

Niagara grapes. A nice strawberry bed could be planted in the southwest corner of the garden. This scheme gives you quite a variety of fruit and a quantity that will supply a large family table throughout the entire year. The walks are three feet wide and constructed of coal cinders laid to a depth of three inches. On either side the walks are bordered with a strip of sod a foot wide, which serves to keep your walks well lined up. Here you may grow all manner of vegetables to suit your taste. Do not, however, grow the same vegetables on the same plot for more than two successive years, change them about. A good deal of green stuff from the garden can be thrown into the hen park for the hens, for this will help them to stand confinement much better. It is never practical to let your hens run at large, for they will destroy your garden and pester your neighbors.

Flowers can best be handled in gardens by themselves. The flower garden (F. G.) is composed of three beds. The center bed is eight feet by fifteen feet, the two end beds are eight feet by ten feet. The row of cherry trees and a privet hedge forms a background and separates the flower garden from the vegetable garden. A perennial border between the flower beds and the hedge runs the entire length of the hedge and ends in a bank of high growing perennials at the north end of the flower garden, which serves also to screen the vegetable garden from the flower garden. These beds can be filled with bulbs in the fall to give you your first spring bloom. Subsequently, when the bulbs are done blooming the bulbs should be removed and the beds filled with bedding plants that will bloom all summer. The perennial border is composed of the hardiest perennials, of which we might name, Golden Glow, Japan and German Iris, Achillea in variety, Columbine, Perennial Asters, Campanula or Bellflower, Lily of the Valley, Hardy Phlox and there are hundreds of other good varieties to select from.

The drive can be made very cheaply and lasting by excavating to a depth of nine inches and filling in with six inches of coarse coal cinders for the first layer and a three inch layer of good gravel for the top coat. It is quite essential that you give the drive a good crown, as it serves for both walk and drive, and it is important that the surface water runs off quickly, so that the drive will always be dry and hard.

The lawn plantations will vary, as will all other plantations, with the locality. In general we may say that all shrubs planted close to the residence should be of a low growing character, so as not to obstruct any view from the house. Among these can be mentioned Dwarf Barberry, Indian Currant, Snowberry, Spiraeas, etc. Shrubs in the background of the border plantations should be high growing shrubs, so they shall serve to screen out any objectionable features that may be beyond



Seat 20 in. x 20 in.
Back 34 in.

THE NORFOLK CHAIR

SPECIAL PRICE FOR CHRISTMAS DELIVERY **\$5.25**

F. O. B. — N. Y.

Cretonne Cushion, Arm Rest and Magazine Pocket.
Shipped on receipt of Money Order or N. Y. Draft.

Our willow furniture is strong, durable and will last for years, comprises chairs, rockers, divans and many novelties all of which can be finished to match any color scheme.

MINNET & CO., Established 1898
MAKERS OF HIGH GRADE WILLOW FURNITURE

367 Lexington Avenue, (Bet. 40th & 41st Streets) NEW YORK
Factory:—CARLSTADT, N. J. Send today for Illustrated Catalogue

Just a little
Shorter
every day
makes the
Light Touch
Monarch
the
typewriter of efficiency



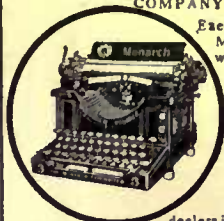
No Three O'Clock Fatigue

IT seems shorter to the operator and so actually is shorter, for the light, quick, easy touch of the Monarch machine makes each day seem shorter than it can possibly seem with any other typewriter. The old three o'clock fatigue is forgotten and the day is finished with more work done, easier than ever. That means efficiency and more profit for the business.

Write us and we will write you.

Better yet, let our nearest representative show you the Monarch. If he isn't near enough and you know of a good salesman, send us his name and address.

THE MONARCH TYPEWRITER COMPANY



Executive Offices:
Monarch Type-
writer Building,
300 Broadway,
New York.

Canadian
Offices:
Toronto,
Montreal.

Branches and
dealers in all countries.

APPLE GROWING

The healthier the tree, the better the fruit. The longer trees are sprayed with "Scalecide," the more beautiful, healthful and fruitful they become. "Scalecide" is the acknowledged leader of all soluble oils—the only one containing distinct fungicidal properties. "Scalecide" will positively kill all soft-bodied sucking insects without injury to the tree. Let us prove these statements. Send today for free booklet "Scalecide—the Tree Saver." Address B. G. PRATT CO., Mfg. Chemists, 50 Church St., N. Y. City.

UNITED STATES MOTOR COMPANY

Columbia Stoddard-Dayton
Maxwell Liberty-Brush
Brush Brush Delivery
Sampson 35 Sampson
48 West 61st St., at B'way, N. Y. City



you. High growing shrubs with trees serve to break the skyline. Among these we might mention, Philadelphus, Honey-suckle, Lilac, Ailanthus, Sumach. Some that are not so high growing and which belong in the foreground of these borders are Dogwoods, Weigelias, Privet, High-bush Cranberry, Forsythia and many others that we might mention if we had in mind some specific locality.

The keynote to your success will be your general arrangement. Economy and art are always on good terms and do not be afraid to mix them. I feel sure that every suburban home-builder that will carry out these suggestions will find that their home will become their pride, a pleasure spot and a success.



Instantaneous and Automatic Hot Water

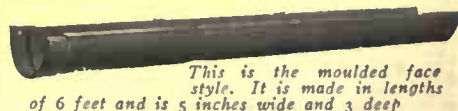
The problem of having sufficient hot water for the bath, kitchen, or laundry, at a moment's notice, is one with which even the large householder has had to struggle; cooks are fallible when it comes to keeping the kitchen range hot enough for a boiler always full of hot water. One of the greatest blessings that any householder can desire is the instantaneous automatic hot water heater, which has now reached such a state of perfection that once installed you need never worry about hot water question. The complete heater may be installed in any house where gas is available. One need only turn a hot water faucet to have immediately hot water pour forth in abundance. The heater itself, which resembles a small furnace, is installed in the basement or cellar. It has no connection with the kitchen boiler, and it has no boiler of its own. [Prospective house builders will do well to make arrangements to include one of these automatic heaters in their specifications.] The price varies from \$80 to \$160, depending upon the number of faucets to be supplied. The \$80 heater supplies three gallons of hot water a minute, with connections for bathroom, kitchen and laundry. The heater is easily installed in houses already built, the connections being made with hot water pipes direct with the heater instead of with the boiler in the kitchen. The workings of the heater, although apparently quite marvelous, are in reality, simple. The heater contains a series of coils of copper pipe, through which cold water is drawn from the water mains. Beneath these coils is a powerful set of gas burners. When a faucet is turned on the cold water from the mains instead of proceeding directly into the kitchen boiler in the old way and forcing the hot water through the open faucet, forces itself through the coils above the burners, becoming instantly hot with contact as it proceeds through these coils and then to the open faucet. Closing the faucet shuts off the burners, as open-



PUT HITCHINGS INDESTRUCTIBLE GUTTERS ON YOUR HOUSE

THEY are made of cast iron in two styles. One forms part of the cornice moulding, the other is the regular half-round, hanging shape. These gutters will not rust out. Outlast even copper gutters. Not affected by salt air or acid conditions. Easy to put up—no soldering necessary. Joints are leak tight and stay tight. Made for all styles of roofs, no matter how many angles and turns. These gutters are the same kind that are used extensively in England. Many have been in use there over a hundred years. To show you their exact size, shape and thickness, we will send you, at our expense, short lengths of both the moulded face and half-round gutters, along with a circular giving complete information.

Write for these samples and circulars.



This is the moulded face style. It is made in lengths of 6 feet and is 5 inches wide and 3 deep

HITCHINGS & COMPANY

Write to our General Office
Meadow St., Elizabeth, N. J.

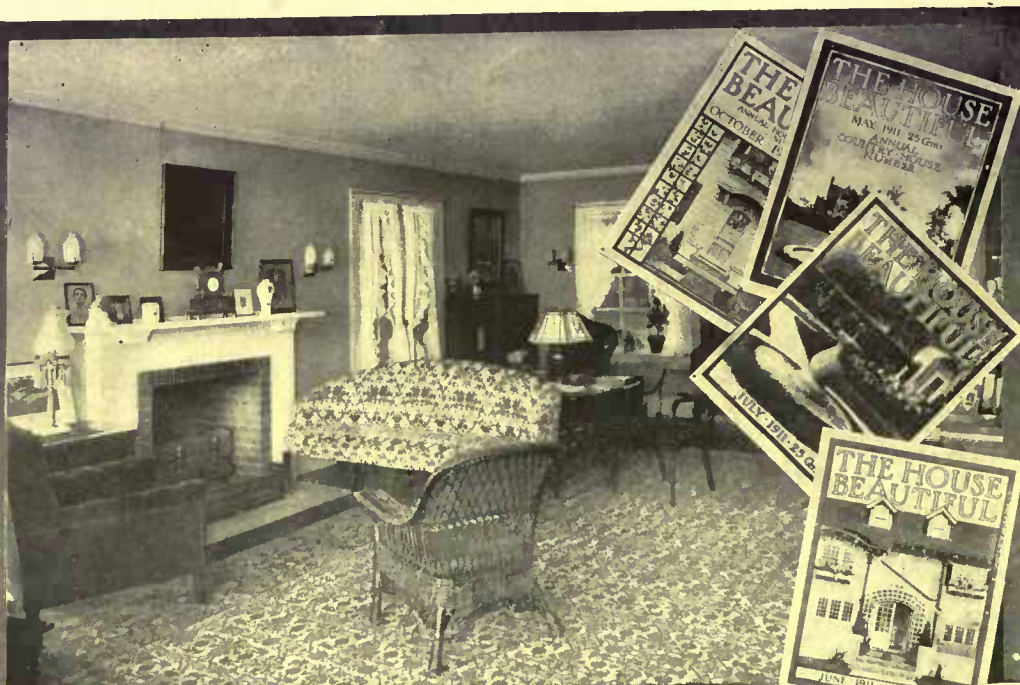


SHEEP MANURE

Dried and pulverized. No waste and no weeds. Best fertilizer for lawns, gardens, trees, shrubs, vegetables and fruit.

Large barrel, freight prepaid East of Missouri River. Cash with order. Write for interesting booklet and quantity prices.

\$4.00
THE PULVERIZED MANURE CO.
25 Union Stock Yards, Chicago



If you want your home —
to represent your taste and ideals you will enjoy

THE HOUSE BEAUTIFUL

It tells you by word and picture how others have made their homes both distinctive and livable. Profiting by their examples, you can go a step further and achieve effects in your home that would be impossible without the expert advice you receive from month to month in *The House Beautiful*.

It will tell you what color to tint your dining room, etc.; what disposition to make of a basement or attic chamber; how to know good furniture; how to care for your lawn and home surroundings, and many other things you want to know. Each issue contains 64 pages with 15 splendid features written by experts and beautifully illustrated.

TRIAL OFFER

With Complimentary Portfolio

The subscription price is \$3.00 per year. But to introduce *The House Beautiful* to new readers, we are making a special trial offer, outlined below. For \$1.00 we will send you *The House Beautiful* for FIVE months, beginning with the current issue, and also make you a present of "The House Beautiful Portfolio of Interior Decoration." The Portfolio is a collection of plates, many in colors, picturing and describing rooms which are unusually successful in their decoration and furnishing. The Portfolio alone is a prize money could not ordinarily purchase.

To avail yourself of this offer, cut out the attached coupon, pin a one dollar bill to it, fill in your name and address and mail it to-day to

HERBERT S. STONE, Publisher, *THE HOUSE BEAUTIFUL*, N.Y. City

The House Beautiful, Room 1716, 315 Fourth Ave., N.Y. City
I accept your trial offer and request that you send me
your Portfolio of Interior Decoration, and also
close \$1.00, covering this special offer.
Name.....
Street.....
City..... State.....

ing it lighted them. There is absolutely no waste in the gas. It is not lighted until the minute the water is needed; it is extinguished the minute enough has been drawn. There is, of course, a tiny pilot light which burns all the time, in waiting for the signal from some faucet to light the large burners; but this pilot does not burn more than ten cents worth of gas a month. For sixty gallons of scalding hot water a day, the cost, including the pilot light, is about three dollars a month. This will supply the average small household with all the hot water necessary. When one takes into consideration that to supply sixty gallons of hot water a day with coal as fuel, would cost a considerably greater sum per month plus the labor, the inevitable dust and dirt, and the added kitchen heat, one can readily see the advantage from an economical side as well as from that of comfort.

K. N. B.



The Investigations of the Agricultural Department

AS scientific farming advances we find further assistance from the Agricultural Department. The experimentation carried on in investigating the spread of contagious diseases affecting farm stock is of the greatest value at a time when the subject is not completely understood. For instance, a recent farmer's bulletin (473) contains an important and most comprehensive statement of facts on bovine tuberculosis. The bulletin deals with the history, nature, symptoms of the disease; how it spreads, how a herd is infected, the tuberculin test, and its prevention and suppression.

"Tuberculosis," the bulletin states, "is a widespread disease affecting animals and also man. Human beings and cattle are its chief victims, but there is no kind of animal that will not take it. Hogs and chickens are quite often affected; horses, sheep, and goats being affected but seldom, however.

The disease is contagious. It spreads from cow to cow in a herd until most of them are affected. It is slow in developing and may not become noticeable for months or even years. The tuberculin test, which cannot do harm to the healthy cow, reveals the germ in a few hours, and always proves successful when in the hands of an experienced veterinarian."

"The disease is common among hogs," the bulletin goes on. "The public abattoirs report that a serious percentage of hogs inspected is found to be tuberculous. The losses among cattle and hogs are enormous, amounting to millions of dollars annually."

Turning to the infection of human beings with the tuberculosis germ through cattle, the bulletin says: "Milk is the staple food of infants and young children and is usually taken in the raw state. If this milk is taken from a tuberculous cow it

Important to those Who Expect to Build



tion may mean the saving of many dollars to you.

We have a limited supply of these sets of six numbers, which are invaluable to those who expect to build or make alterations. Although the regular price is \$1.50, we make you a special offer of \$1.00 for the six, while the sets last, if you will mention *HOUSE AND GARDEN*. They will soon be sold. Send us your order to-day; to-morrow may be too late.

This \$1.00 Should Save You Hundreds

THE ARCHITECTURAL RECORD, 203 Metropolitan Annex, New York
Enclosed is \$1.00, for which please mail your last six numbers (including the October COUNTRY HOUSE NUMBER), according to special offer in *HOUSE AND GARDEN*.

Name.....

Address.....

WHEN PLANNING TO BUILD you will find it of great value to first make a careful study of the illustrations of houses, etc., that have been designed and built by a number of leading architects and to also learn their ideas regarding the best interior arrangement and the most appropriate furnishings. This important information, which would greatly aid you in deciding about your own building plans, when you take them up with your own architect and builder, can easily be obtained from the several hundred exterior and interior designs that are beautifully illustrated in the last six numbers of the

Architectural Record

The National Magazine for Architects, Owners and Builders
A powerful Business-Producer for those firms whose products are used in building construction or equipment. Guaranteed circulation exceeds 10,000 monthly.

In these six numbers are also illustrated and described the numerous building specialties that add very much to the comfort, convenience and value of the modern home, without materially increasing the initial cost; and this information



In writing to advertisers please mention *HOUSE AND GARDEN*.

may contain millions of living tubercle germs. Young children fed on such milk often contract the disease, and it is a frequent cause of death among them.

"Meat from tuberculous cattle is not so likely to convey the infection, for several reasons. It does not so frequently contain the germs; cooking destroys those that may be present, and, lastly, meat is not consumed by very young children."

As to the spread of the disease, the bulletin says: "Sooner or later the tuberculous cow begins to give off the germs of the disease. The germs escape by the mouth and nose, the bowels, in the milk, and in discharges from the genital organs. When the germs are being given off in any of these ways, the disease is known as open tuberculosis."

The bulletin concludes with: "Dark, dirty, crowded stables are favorable to tuberculosis. Under these conditions the disease spreads rapidly and is only kept out with difficulty."

"Clean, airy, well-lighted stables, on the other hand, are unfavorable to the development of the disease. If brought into such a stable it does not spread so rapidly and is not so difficult to get rid of as in the first case."

"A well-built, sanitary stable need not be made of expensive material or of elaborate design, but should have plenty of light, air, and drainage."

"Light is very important. Direct sunlight is a great destroyer of germ life. Tubercle bacilli soon die if exposed to sunlight. It is a disinfectant, always ready to work without cost."



Naming the Country Home

THE return to nature has been the social phenomenon of the last decade.

Our grandfathers—or our grandmothers, rather—herded in great hotels, at Long Branch or Saratoga; our fathers "took trips" to Florida, or the Pacific Coast; but we, of this generation, are not content merely to visit the country, we want to own a bit of it. We covet a place where we may build a bungalow, or moor a houseboat, or, at least, pitch a tent; a place that we may call our own, and this very calling necessitates a name. So, when once the spot is selected and the tabernacle rests, the question is "What shall we name the summer home?"

Simple as the question sounds, it is, by no means, easy to answer. There are, it is true, hundreds of names to select from, but to find the one, attractive, euphonious, unhackneyed and, above all, suitable, is becoming more and more difficult.

In Adam's diary—that interesting document that Mr. Mark Twain has saved to us from oblivion—Adam tells how Eve went about naming all the creatures in the garden from their "looks." She called the dodo, a "dodo" because it looked like a dodo. This intuitive method is really the one that should be applied in naming



Moving a Big Pine on the estate of the late William C. Whitney. Tree on rollers moved by rope and tackle blocks

A Novel Winter Tree Planting Suggestion

Right around your place within a radius of say 10 miles, haven't you seen Pines, Cedars and various wild trees that you wished were on your grounds? Can you buy them? Then why don't you, and we will move them for you now in the midst of winter.

Do it with our special tree moving apparatus and the assistance of your team, or one we will hire from a local man.

Don't think because your walks are frozen hard that the ground under the trees is. We work all winter among the trees in our nursery, and what we can do there we can do for you—and do it economically.

Of course, if you prefer to have us send your trees from our nursery—fine, sturdy, root-pruned trees—we will gladly do that. But in either case, now is the time to plant big ever-

greens, 6 to 40 feet high. Don't put it off till spring, for the chances are the spring rush will make you put it off till fall—and then put off till spring and so on. Get it done, and have us do it for you. Send for our catalog—Winter Evergreen Moving—if you can't come and talk it over with us at our Westbury nursery. We are only 40 minutes' train ride from New York, or it's a beautiful motor ride, and we are right on the Jericho Turnpike.

Isaac Hicks and Son, Westbury, L. I.

FINEST NEW DAHLIAS

direct from Holland

Last Spring we sold a large quantity of the latest dahlia creations to American flower lovers. In addition we brought over a quantity of the leading new varieties and planted them in our own grounds, outside Philadelphia, acclimating them to soil and climate. Among the varieties are the following Wonderful New Dahlias introduced by us.

The new decorative Dahlia **PRINCESS JULIANA** received an award of merit, R. H. S., London, 1910 and a first-class certificate, Amsterdam, 1909. The first decorative Dahlia ever introduced. \$1.50 each.

Our New Dwarf Paeony Dahlias. The ideal bedding plant, 20 inches high, literally covered with Paeony Dahlias of the finest sorts for cutting purposes. 60c. each, \$5.00 per dozen.

Dwarf Mignon Dahlias. A new strain of very dwarf habit, 15 inches high; producing a profusion of single flowers, from June until frost. Received five first-class certificates and five awards of merit at Amsterdam. 75c. each, \$3.50 for six. Send for a copy of our Dahlia leaflet. Order early, for Spring delivery, before acclimated stock is exhausted.

Gt. van Waveren and Krull, American Branch House, 142 North 13th St. Louis Berger, Mgr. Philadelphia, Pa., U. S. A.

Home Offices and Nurseries: Sassenheim, (Haarlem,) Holland. Other Branches: Moscow, Russia; Leipzig, Germany; Buenos Ayres, Argentine Republic; London, England; Goteburg, Sweden.



"PRINCESS JULIANA"

Baskets

Make Ideal Christmas Gifts. Write for Catalogue.

Burlington Willow Ware Shops
207 Washington St. Burlington, Iowa

THORBURN'S BULBS

Largest and Finest assortment of high grade bulbs and roots in America. — Send for catalogue — mailed free.
J. M. THORBURN & CO., 33 Barclay St., New York

RATS Killed by Science

DANYSZ VIRUS

Send for particulars. 1 tube 75c., 3 tubes \$1.75, per dozen \$6.00.
Independent Chemical Company, 72 Front St., New York



MRS. HUMPHREY WARD

Author of "Robert Elsmere"

has written a sequel to that novel which so stirred England and America

"The Case of Richard Meynell"

¶ For twenty years Mrs. Ward has written no book so important and vitally interesting as this. The publishers, while they fully realize the seriousness of the statement, believe that "The Case of Richard Meynell" is a greater work than "Robert Elsmere." It represents the more mature and vivid statement of questions which are being propounded in all countries where people are awake to changing conditions in all churches and all sects.

¶ As a story, the career of Richard Meynell is vastly absorbing, and the statement of the new conditions twenty years after Elsmere's time is powerful in the telling, as well as important.

A book for a whole generation of readers

Six photogravure Illustrations. Fixed price, \$1.35 (postage 14c.)

GARDEN CITY

DOUBLEDAY, PAGE & CO.

NEW YORK

the country home. What reader of Mr. Kipling's exquisite story, "An Habitation Enforced," will ever forget "Friars Pardons," and the five farms, "Griffons," "Rocketts," "Burnt House," "Gate Anstey," and the "Home Farm," that made up the estate? Does not every one of them look exactly like its name! If possible, then, decide exactly what the country home "looks like" and the question is self-answered.

First, study its location. If set on a hill, "Hill Top," "Hill Side," "Hill Slope," "Hill Crest," "Watch Hill," "Beacon Hill," are a few of the possible combinations. If one does not care for the word "hill," one of the many synonyms may be substituted, as "Rise," "slope," "peak," "summit," "brae," "barrow," if sandy, "dune," and, if high and rocky, the old English "tor."

Possibly the cottage is near a stream or waterfall. Then "brook," "beck," "burn," "cascade," "falls," "springs," are a few of the words that may enter into the name. If in an open field, "meadow," "mead," "heath," "terrace," "valley," and "fen," if in the wood, "glen," "forest," "wood," "grove," and "thicket."

These words may be prefixed to "cottage," "cote," "place," "lodge," "house," "cabin," "hall," "court," "camp"—whatever name may fit the particular form of domicile; or to one of the much liked English endings;—"croft," "wold," "crest," "more," "mere," "wood," "chester," or "stead." Again, these English endings may be suffixed to names of trees, flowers or birds, making another long list. Any tree will form the basis of an attractive name, only be sure that it is the characteristic tree of the place. "Pine," "fir," "cedar," "cherry," "locust," "chestnut," "elm," "maple," "oak," "briar," and "woodbine" are a very few. The list is only limited by the number of species. "Briar Cliff," "Cherry Hedge," "Willow-hurst," "Hazel Dell," "Woodbine Cottage," "Elmstead," "White Birches," "Laurel Hill," "Oak Bluff," are examples of such names.

"But," some one objects, "these names are not what the house looks like; they are all names of its surroundings. What are some of the names that come directly from the house itself?"

It may be named from its material: "Cobbles," "Boulders," "Shingle," "Logs," or, like Mr. John Burroughs' cottage, "Slabsides." It may be named from some architectural feature: "Gambrels," "Dormers," "Gables," "Colonia," "Ridgepole," "Hearthstone," "Oriels," or "Timbers," or, it may combine the color with some other characteristic, as, for example: "Red Top," "Gray Stone," the "White House," "Red Cote," or like Mr. Cleveland's Nantucket home, "Gray Gables."

As the summer home is, especially, a place of rest and contemplation it is fitting, if desired, to let the view or exposure decide the name. "Sea View," "Hill View," "Near View," "Fair View," "Bonnie View," "Vista," "Belle Vue," "Out-

ANTIQUES AND HAND BRAIDED RUGS

Send 4c. in stamps for catalog and lists

RALPH WARREN BURNHAM
IPSWICH IN MASSACHUSETTS

look," "Overlook," "Lookout," and "Sunnyside," "Shadyside," "Morningside," "Brightside," "Daybreak," "Sunburst," are all significant.

A play on the owner's name sometimes gives a pleasing touch of individuality. Mr. Vanderbilt's "Biltmore," Mr. Howard's "Howardon," the "Sherwood Forest" of the E. E. Sherwood family and Mr. Hazard's amusing "Hap-Hazard" are good examples of this class of names. The very cleverest one, however, is the name of a cottage owned by Mr. Maurice Sheppard, "Shieling," the Hebrides' word for Shepherd's hut.

This use of Shieling is suggestive, too, of another class of words—those from other languages that have appropriate meanings. Nothing could be better than the Japanese "Nikko"—Sunshine—for the popular Japanese cottage; the German "Herzheim"—heart home—just fits the Dutch architecture; while no name could be prettier or more suitable for a lodge in our American forests than some of the musical words of our native Indians. "Mohegan," "Minnehaha" (Laughing Water), "The Long House," "Antlers," "Arrow Head," "Horicon," "Uncos," "Manitou," are a few of these names. The lover of Cooper will easily add to the list.

From Cooper the search leads to other books and authors, for there is real joy in linking the place of rest and leisure with one's favorite poem or romance. Of course the mistress of "Boffin's Bower" will have a set of Dickens on her shelves, as the owner of "Kenilworth," "Melrose," or "Woodstock" will bring her Scott with her. It was the boy of the family who names the summering place on one of the Thousand Islands, "Treasure Island," and the grandfather who christened another one "Ellerslie," from his own boyhood favorite, "The Scottish Chiefs." "Windermere," "Atlantis," "Acadie," "Westward Ho," "Rip Van Winkle"—what a suggestion of blissful sleep—"Rosemary," "Brook Farm," "Avelon," "Appledore," "Valkyrie" and Madame Modjeska's "Arden" are all of this class.

Sometimes, however, the summer home is such a deep delight, such a realization of long cherished hopes and plans, that the owner feels that nothing short of the expression of his satisfaction in the accomplishment will serve for a name. This is naming the summer home for what it looks like *subjectively*. A few such names are. "Rest-well," "Eureka," "Eden Bay," "Paradise Point," "Joy Land," "Liberty Camp," "Peace Haven," "Hope Cottage," "Heart's Desire." One couple called the new cottage in which they spent their honeymoon "Hearts Content." They have spent their summers there ever since for thirty years, and it has always been "Heart's Content" to them and their children.

Perhaps this list would not be complete without a mention of a class of names that may be called facetious. When witty and apt, these names are often amusing, but,



HARDWARE FOR HOMES OF REFINEMENT

Knobs and escutcheons with simple ornament are popular, particularly for Colonial, Craftsman and Mission homes. We illustrate a few designs only. Others are illustrated in booklet OK 17 Copy on request.

P. & F. CORBIN
NEW BRITAIN, CONNECTICUT

P. & F. CORBIN
of Chicago

P. & F. CORBIN
of New York

P. & F. CORBIN
Philadelphia



A Smart Little Country House at Glencoe, Ill.

Made better to look at, and better to live in, by Casements—the window which our simple and perfect new devices have made the best by far for the home.

**THEY GIVE THE HOME LOOK
THEY REALLY VENTILATE
NO STICKING OR RATTLING
NO SCREEN TROUBLES
NO CURTAIN TROUBLES**

Send for free booklet

The Casement Hardware Co.
175 N. State Street Chicago, Ill.

HOWARD Dustless Duster

(25 Cents Prepaid)
Makes possible a dustless home. Write for our Dust Book "A" and small free sample.

It will show you how to make dusting a pleasure, how to dry clean a silk skirt in five minutes, how to clean windows in a twinkling, to polish pianos and highly finished furniture, to make cut glass sparkle like diamonds, to make an old derby look like new.

Money back if not satisfactory
HOWARD DUSTLESS DUSTER CO.
164-43 Federal Street, Boston, Mass.

HOWARD
DUSTLESS DUSTER



"No Oil to Soil"

HOTEL CHAMBERLIN

At Old Point Comfort, Virginia

Spend Your Holidays Here

No other place offers such unusual attractions or affords such perfect facilities for rest and recreation.

First take the Hotel itself. Its location is unique—at Hampton Roads and Fortress Monroe, in the centre of military and naval activities. A glance at the illustration above shows The Chamberlin—right at the water's edge, commanding an unrivalled marine view. Luxurious lounging rooms, sun parlors, etc., make for rest and comfort. The sea air is invigorating.

Indoor sea bathing in a magnificent pool, which rivals in splendor of appointment the baths of Ancient Rome, is one of the most enjoyable and beneficial features of The Chamberlin. So airy and light is this

For further information and interesting illustrated booklets, apply at all Tourist Bureaus or Transportation Offices, or address me personally.

GEORGE F. ADAMS, Manager, Fortress Monroe, Va.

New York Office, 1122 Broadway

sea pool, that bathing in it is next to bathing outdoors. There is a constantly changing supply of pure, fresh, filtered sea water of an agreeable temperature.

There are medical and tonic baths, also—of every kind and description—in charge of an expert.

By day, there are military and naval manoeuvres, trips through surrounding historic country, golf, tennis, boating, etc. In the evenings, there is dancing for those who wish it.

The cuisine is perfect—real Southern cooking—fresh oysters and sea food from nearby waters—fresh vegetables from our own gardens. Many count the cuisine of The Chamberlin as its first attraction—the one that lingers longest and fondest in memory.

like nicknames, should fit like a glove and even then they are only suitable to the rough camp, not to the substantial permanent home. Many of them, too, like "Kill Kare," "Uneeda Rest," "Hate-to-Quit-It," "Restawhile," "Dew Drop In," "Take-It-Easy," have become so common as not to have even novelty to recommend them. If one cannot coin his own he would better take some straightforward simple name that will endear itself with use.

Another word of caution may not be amiss. While it may not be absolutely necessary to have the name of the summer home fit the locality, at least it should not be a misfit. "Crestdale," for example, is a contradiction of terms. One may have intended for years to name her summer home "Anchorage," but it certainly does not fit a mountain bungalow any more than "Wigwam" does the seaside cottage. Then, while simple straightforward names are usually preferable to romantic, highly poetic ones, there is the other extreme. "Secluded Quiet" and "Good Rest," for example, are only one degree removed from "Comfortable Mat-trasses" and "No-Flies-Nor-Mosquitoes." In short, one needs a sense of humor, even in naming a country home.

As there are a few happy mortals who can wear ready-made clothes and have them look as if made to order, so doubtless there are summer houses that can be fitted perfectly by ready made-names, and, for such, the following list is appended:

"The Angler," "Comfort Cottage," "Content" (for a tent), "Bonnie Doon," "Horse Shoe Cottage," "Shadowland," "Beulah Land," "Nestledown," "Homestead," "Inglenook," "Heatherblow," "Mascotte" (good luck), "Bliss House," "Bide-a-wee," "In Clover," "Home Nook," "Shady Lawn," "Breeze Corners," "Meadow Creek," "Brookside," "Silver Springs," "Lea Haven," "North Gate," "High Cliff," "Green Side," "Camp Sentinel," "The Ledges," "Echo Camp," "The Fold"—the home of the Lambs; "Sunny Brae," "Uplands," "Brownlands," "Home Acre," "Undercliff," "The Breakers," "Surf Cottage," "Seabreeze," "Mizzentop," "Atlantis," "Westerlea," "Two Oaks," "Mabelle Croft," "Dunrobin," "Crow's Nest," "Wildwood," "Graylook," "Ethelsbrae," "Homeport," "Seamoor," "The Moorings," "Tanglewood," "Shore Acre," "Rock Hill," "Brightmore," "Wendover," "Heather Lea," "The Chestnuts," "Craigmoor," "Sunnymead," "Cedarcroft," "Old Pastures," "Rockfield," "Quarterdeck," "Dunmere," "Barrowmere," "Orchard Place," "Stonetop," "Hill Stead," "Burnmonth" and "Greenlea."

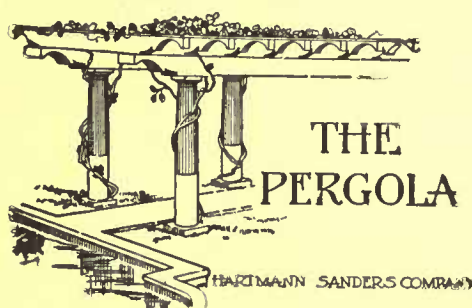
MAY ELLIS NICHOLS.

The Northern Tradition

(Continued from page 364)

fitted to its uses. What difference does it make whether windows are in groups with mullions between or each a single rectangle fitted with small, square panes, or the doors round-arched with fan-lights

(Continued on page 416)



Send for catalogue No. P-27 of Pergolas, sun dials and garden furniture, or P-40 of wood columns.

HARTMANN - SANDERS CO.

Elston & Webster Avenues, Chicago, Ill.
East. office, 1123 Broadway, New York City

Exclusive Manufacturers of

KOLL'S PATENT LOCK JOINT COLUMNS

Suitable for Pergolas, porches and interior use.



Opens with the foot

THE STEPHENSON

THREE THINGS YOU NEED

FIRST: The only sanitary method of caring for garbage, deep in the ground in heavy galvanized bucket with ball. No freezing, no odors. Avoid the battered can and scattered refuse resulting from removal of frozen contents. Health Demands It.

**UNDERGROUND GARBAGE RECEIVER
UNDERFLOOR REFUSE RECEIVER
Spiral Truss Ribbed ASH BARREL**

SECOND: This clean, convenient way of disposing of ashes from furnace or hot water heater, cellar and yard refuse. Fire-proof, flush with floor. Abolish the old ash barrel.



Outwears all others.

THIRD: The Stephenson Spiral Truss Ribbed Ash Barrel has no unsanitary corrugations for refuse to cling to. It is so constructed that it has the greatest strength and durability without excessive weight. Nine years in practical use. It pays to look us up.

Sold direct. Send for Circulars on each.
C. H. STEPHENSON, Mfr.
20 Farrar Street Lynn, Mass.

Easy to Sweep into.

"It is better to be safe than sorry"—and "Thatcher" heaters are always safe
THATCHER "TUBULAR" FURNACE

Fresh out-door air is drawn up through various heated passages into the mixing chamber above the dome whence, thoroughly warmed, it passes through the distributing pipes into the various rooms.



For sixty years the Leader in warm air heating and ventilating. Thoroughly scientific and hygienic, efficient and economical. Durable and satisfactory. Send for catalog and testimonials.

New York

THATCHER
FURNACE COMPANY

Chicago

ALSO STEAM AND HOT WATER HEATERS, UP-TO-DATE

Dining Table Luxury

The elegance of the soft surface on which dishes and silverware are moved in silence is secured by using the

Peerless

Asbestos Table Mat

But, best of all, it will absolutely protect your polished table top from damage of any kind from hot dishes or spilled liquids.

Peerless Table Mats are made of heavy asbestos boards; neither heat or liquid can get through them to harm the table. They are made in sizes to fit all round, square or oval tables. The sections are hinged so they may be folded up and put in a drawer. The soft flannel coverings are easily removed for

washing. See the Peerless Table Mat at your dealer's. If he cannot show you the mat bearing this trade-mark, write us for the address of the nearest dealer who can—and our booklet—"To the Woman Who Cares."

CHICAGO ASBESTOS TABLE MAT CO.,
DEPT. 213 215 LOOMIS STREET, CHICAGO, ILL.



The Ideal Gift

Beauty and utility unite to make a Handel Lamp the perfect Christmas gift. It will remain a treasured part of the home surroundings for years.

HANDEL LAMPS

embody the highest ideals in art and, the most painstaking skill in craftsmanship.

Handel Lamps and Fixtures provide practical and artistic lighting effects. Made for electricity, gas or oil they are adaptable to any home, anywhere. In making up your list of Christmas gifts, be sure to include one or more Handel pieces. Lamp illustrated, No. 5339, for Christmas delivery, \$29.00.

At leading jewelers or lighting fixture dealers you can select a Handel Lamp or Fixture to suit any taste or harmonize with any setting. Upon request, we will gladly refer you to the dealer nearest you. Look for the name "Handel" on every lamp.

Send for booklet "Suggestions for Good Lighting," which will assist you to make a suitable selection.

THE HANDEL COMPANY

390 East Main St., Meriden, Conn.

New York Showrooms, 64 Murray Street

Get a Boat of Your Own AND JOIN THE FLEET



The Boat Buyer

ISSUED QUARTERLY — INITIAL
NUMBER READY DECEMBER 1st

Published for the boat owner and the man who wants to become one, will tell you how inexpensive the sport of boating really is.

It starts you right in the selection of craft, engine and equipment—tells you just what kind of boat is best adapted to each specific sort of requirement, what type of engine is best suited to each type of boat.

McBride, Nast & Co., 31 E. 17th
St., New York City. Enclosed find
50 cents. Send me the BOAT
BUYER for one year.

Name
Street and Number.....
Town and State.....

To the man who wants to know
the "why," "wherefor" and "how
much" of the boating game—the
BOAT BUYER is a godsend.

Fill out the blank, mail with 50c
and receive the BOAT BUYER for a
whole year.

BOOK BARGAINS

THE exceptional values quoted here are indicative of the importance to you of becoming familiar with PEARSON'S Book Department.

Our facilities enable us to ship promptly any of the New Novels, Reprints of Popular Novels in Low Priced Editions, Reference Works, and all the Standard Sets in different style bindings.

Ainsworth's "Tower of London"
2 Vols. Cloth, 89c

Balzac
18 Vols. Cloth, \$10.99

**DeKock's "GUSTAVE" and
"BARBER OF PARIS"**
2 Vols. Cloth, 96c

De Maupassant
9 Vols. Cloth, \$9.00; ¾ Leather, \$11.75

Dickens
20 Vols. Full Limp Morocco, \$19.75

Every Girl's Library
10 Vols. Cloth, \$4.00; ¾ Leather, \$5.00

Gaborian's Detective Tales
5 Vols. Cloth, \$2.59

Hugo
10 Vols. ¾ Leather, \$11.25

De Maupassant's Complete Works
17 Vols. Cloth, \$12.75

Kipling
10 Vols. Cloth, \$2.10

Lever's Military Romances
6 Vols. Cloth, \$2.55

Lossing's History United States
8 Vols. Cloth, \$12.50; ¾ Leather, \$16.50

Napoleon and His Marshals
2 Vols. Cloth, 89c

Washington and His Generals
2 Vols. Cloth, 89c

Shakespeare
13 Vols. ¾ Leather, \$12.19

Oscar Wilde
12 Vols. Cloth, \$11.75; ¾ Leather, \$15.75

Orders accompanied by remittances will be shipped
prepaid where the charges do not exceed \$1.00.
Address all orders to

**Pearson's Book Department, 472 EAST 24th ST.
NEW YORK, N. Y.**



BROOK TROUT



BLACK BASS

These Two Fish Pictures Free

with **RECREATION**. Each picture is in natural colors and is 13 x 15 1/4 inches in size. Such pictures sell at art stores for \$1.00. Read "Our Just to Get Acquainted Offer" below.

RECREATION is a big and beautifully printed outdoor magazine. Its text and illustrations are furnished by men who tell with pen and camera about what *they* have seen and experienced. This means accurate and authoritative, as well as interesting, articles and pictures.

RECREATION tells the man who hunts, canoes, camps, goes fishing, or engages in any recreation which takes him into the open, just how, when, and where he can get the most out of his favorite sport.

RECREATION writers are people who have something worth while to say—else they could not write for **RECREATION**. Sometimes they have big names, but we buy the *articles*, not the names.

RECREATION'S Editor is on a four-thousand mile trip, editing the magazine en route, camping, fishing, hunting, and talking to sportsmen everywhere. This is one of the ways **RECREATION** gets its actual knowledge and practical information for sportsmen.

The following extract from a letter received from a subscriber rounds out a description of **RECREATION** tersely:

"I want to compliment you on your superb illustrations, and especially on the excellent material used, and also on the all-round recreation atmosphere and absence from fadism."

OUR "JUST TO GET ACQUAINTED" OFFER

RECREATION is \$3.00 a year or 25 cents a number. To introduce it to men who do not know the magazine, we will send it for one year for ONLY \$2.00, and, also send free the two beautiful pictures; one of BROOK TROUT and one of BLACK BASS, reproduced in their natural colors from paintings made especially for us by H. A. DRISCOLE, famous as a painter of game fish. These pictures are worthy of framing for your den. Price of pictures above 60 cents. You can buy December **RECREATION** at the news stand (or send us 25 cents if you prefer), and then ACCEPT our offer or send us \$2.00 as above on our usual guarantee of money back if not satisfied. Give your order to your home newsdealer if you prefer.

RECREATION :: K-24 West 39th St. :: NEW YORK CITY

INEXPENSIVE HOMES OF INDIVIDUALITY DE LUXE EDITION

This little book of 64 pages contains 108 illustrations and floor plans of the best houses of moderate size built to-day. "Inexpensive Homes of Individuality" offers an exceptional opportunity of studying in detail some of the best designed smaller houses of various architectural types the country over, ranging in cost from two to eight thousand dollars. It is printed on the best stock, with a rich binding of green and gold, superbly illustrated, and contains an introduction on the "Choice of a Style for the Country or Suburban Home," by Frank Miles Day, Past President of the American Institute of Architects. It is a lasting source of inspiration and suggestion. Price, 75 cents postpaid.

McBRIDE, NAST & CO., Publishers, 31 East 17th Street, New York

(Continued from page 414)

it make whether windows are in groups with mullions between or each a single rectangle fitted with small, square panes, or the doors round-arched with fan-lights or depressed-pointed with clustered mouldings?

They are of a type with gables and sloping roofs, the whole house under a single roof or with a long main ridge with intersecting gables disposed either formally or informally as the site, the plan, or the owner's whim suggests. In each the gentle lines of silhouette seem to fit our irregular treatment of a countryside where, for instance, the long tranquil lines of the Italian villas might seem unrelated. They must have a proper setting of formal terrace and garden to be in their full majesty; but our northern type is democratic and seems born of the soil. It suits hillside or meadow, formal gardens or no gardens at all with equal naturalness, a *sine qua non* of a successful American type, for while one man likes formality, another does not; where one man desires a garden with straight paths and arbors, another would sow in grass with clumps of trees, and so it goes.

"Northern Tradition" as a title is misleading in one respect. Its defense has not been attempted because it is traditional; that were an emotional reason, as, alas! most architectural arguments seem to be—misty, built on a morass of sentiment, will o' the wisps which lead to self destruction. But the argument is that the house should take its form from the materials employed and the constructive problem to be solved, all in the easiest and most natural way, the old, old argument of Ruskin, the "*Cherchez le Vérité*" of the Paris school, by which they mean that the most direct solution of the constructive problem should determine the form of the result. Now, since the problem has been substantially the same in Northern Europe since the Middle Ages, we should test our solution by comparison with the persisting basic type there; that as it seems, our solution agrees with this, we may feel sure we have argued logically, that our type is the same as this, and that by so building we are merely continuing the "Northern Tradition."

Some of my predecessors have argued that historic association should govern style; others that any beautiful quality should be adopted. Both true, but is it not true that we should take only what we can properly assimilate; that all else, be it beautiful beyond words, we may admire but must pass by, to work out our own solution with the natural use of our own materials?

Look at **HOUSE AND GARDEN'S** symbol in the circle, each side the magazine title on the front page; what "style" is that house? Dear knows; but it does not matter. Unconsciously the magazine has adopted in its simplest form the Northern Tradition, and what is unconscious is natural, and what is natural is best.



The BEST FLOOR

Factories, Offices, Corridors, Churches, Restaurants and all public buildings, as well as Kitchens, Pantries and Bathrooms of private houses are best floored with **IMPERIAL SANITARY FLOORING** Because it is durable, water-proof, fire-proof, smooth and handsome

Applied in a plastic state, it hardens in a few hours and presents a smooth, warm, non-slipping surface absolutely free from all cracks and crevices. Full information and samples on request.

IMPERIAL FLOOR COMPANY
Mill and Furnace Sts. Rochester, N. Y.

BOBBINK & ATKINS

WORLD'S CHOICEST

Nursery and Greenhouse Products

The proper way to buy is to see the material growing. We shall gladly give our time and attention to intending purchasers visiting our Nursery and invite everybody interested in improving their grounds to visit us. We are growing the best Nursery Products in the market and when there are better grown—we shall grow them. Our Nursery consists of upward of 300 acres of highly cultivated land, and is planted with a choice selection of Ornamental Nursery Products, placing us in a position to complete plantings and fill orders of any size.

ASK FOR ILLUSTRATED GENERAL CATALOGUE NO. 40. It will tell you all about them.

BOBBINK & ATKINS

Nurserymen, Florists and Planters. Rutherford, N. J.



**Clean Stem
Mushroom**

**Lamp
\$45**

In rare old Chinese glazes "famille rose," Chinese Blue, Mirrored Black or Rouge Flambe. The artistic colorings and exquisite tones of these Lamps are amazing.

FULPER VASEKRAFT LAMPS

are the very latest in Home Decoration and lend beauty to the rooms they adorn. Besides Lamps you'll be delighted with the odd and attractive Vases, Toddy Sets, Tobacco Jars, suitable for gifts at reasonable prices.

Send for Art Catalogue mailed Free on request.

Fulper Pottery Company

FOUNDED 1805

3 Fulper Place, FLEMINGTON, N. J.
New York Exhibit: 333 Fourth Avenue
Formerly Tiffany Studios



WINTER PLEASURE VOYAGES WHITE STAR LINE TWO YACHTING CRUISES

To the
**RIVIERA
ITALY and
EGYPT**
Via
**AZORES
MADEIRA
GIBRALTAR
ALGIERS and
VILLEFRANCHE**

By the Mammoth
Steamships

"Adriatic"

"Cedric"

The Largest British
Steamers Ever
Sent to the Med-
iterranean
SAILING FROM
NEW YORK

December 2

January 10 January 24
February 21 March 6

Also Regular Sailings from
NEW YORK and BOSTON to
MEDITERRANEAN PORTS

By the Superb Twin-Screw Steamers
"CRETIC" "CANOPIC" "ROMANIC"

Full particulars on request.

White Star Line

9 Broadway, New York

OFFICES and AGENCIES EVERYWHERE



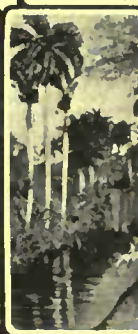
RIVER NILE



CULEBRA CUT



PICTURESQUE NAIPES



BEAUTIFUL TRINIDAD

By the New
Triple-Screw
Steamship

"Laurentic"

The Largest
Steamer Ever
Sent to the
Caribbean

SAILING from NEW YORK

January 20
February 24

EACH CRUISE THIRTY-ONE DAYS

\$150 and Upward.

Booklet and itineraries on request.

Pleasure Cruise Department

9 Broadway, New York

OFFICES and AGENCIES EVERYWHERE

GIFT SUGGESTIONS

Few gifts are more widely appreciated by everyone and none gives greater value for a small price than something in HAND WROUGHT WILLOW WARE

SERVING TRAYS
LAMPS
CHAIRS

BABy CHAIRS
WOOD BASKETS
TEA CARTS

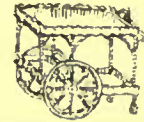
STOOLS
LAMP TABLES
PLANT BASKETS

MAGAZINE STANDS
FLOWER BASKETS
FANCY BASKETS

Inexpensive and serviceable Willow Chairs and Furniture for children.
Send for our Sketch Sheets and prices of complete line of Willow Ware, mailed FREE ON REQUEST.
Mail orders may be sent with absolute confidence. Selections returnable if not satisfactory.

WALTER J. BRENNAN COMPANY, 436 Lexington Ave., New York

It would suggest to those who have our Sketch Sheets to order promptly to avoid the Holiday rush.



An Ideal Christmas Gift

The International Studio

\$5.00 a Year

"By all odds the most beautiful magazine printed."—N. Y. Tribune.

IT is the leading Art magazine published at any price. It deals with everything from painting and sculpture to house decoration, architecture and landscape gardening; including the best work of craftsmen, pictorial photographers and art-workers in every field. Every issue contains one to two hundred illustrations, numerous plates in full color, covering the art work of the world at large. Art dealers value the color plates, gravures and monotypes for framing. Homes of culture need *The International Studio*, because it is the foremost magazine for art-lovers generally. It is an ideal Christmas gift to one who loves beauty in all things. SEND FIVE DOLLARS NOW FOR YOUR OWN SUBSCRIPTION BEFORE YOU FORGET.
JOHN LANE CO., 114H West 32d St., New York City

The Annual Building Number of House & Garden

A MAN wrote in to us the other day and asked whether we couldn't possibly postpone for six months the appearance of our next Building Number. For nearly three years he had been practically ready to start work on a new home. Each January he had found so many new ideas in the Building Number that he revised all his plans. If we could only hold back this coming January's issue until he could get a spade into the ground in early spring, his troubles would be over, he hoped; otherwise he feared he would rent a house and revise plans all his life.



We were extremely sorry not to be able to oblige him, but for the sake of the thousands who can make up their minds more quickly and who also will build next spring, perhaps, we cannot longer hold back the deluge of information, suggestions, clever ideas that other builders have evolved, plans, cost data, and *pictures* that tell a thousand and one stories. We had an idea that last year's Building Number was a good one—a man happened to write us that he had started his new home soon after receiving it, and that for every knotty problem he met, that Building Number pointed out a solution. However, here's a better one this year. It covers its subject like a blanket—not a wet one, and if you fail to find it crammed full and running over with brand-new ideas that you can snatch out to adapt to your own problems, why—we'll throw up our hands.



Which would you rather do—build a *new* house that expresses your own tastes and ideas of arrangement throughout—spic and span in its modern materials, or take one of the homes our ancestors built a hundred years ago and remodel it to suit your present-day needs as far as possible? That question is the subject of a debate in the January Building Number, and the pleaders for both sides have their war paint on.



Do you know that if you change your mind and decide to build that house of yours with stucco outside instead of clapboards or shingles it will cost you about ten percent more? There's a lot more of such information in an article on Comparative Costs of Building Materials.



Ready Dec. 23rd



ANOTHER thing—you may have had an idea that there is an infinite number of permutations and combinations in the arrangement of a first floor plan. Wrong. A writer on Typical Floor Plans demonstrates that most houses may be grouped under two or three type plans, and in these there are but minor variations. Simplifies the planning problem immensely.



Then there are articles—with pictures that fairly make your mouth water—on lighting fixtures, hardware, rough or smooth plaster walls, casement windows, how to keep a cellar from getting wet or how to make it dry if it has that bad habit. There is another article on that vital question of choosing an architectural style, one on tiling for use and decoration, one showing some valuable short-cuts in achieving paneled effects. Professor Ogden of Cornell clears up, once for all, the sewage disposal problem. A young woman tells how she and her husband bought a piece of land and lived on it in a tent during the summer, working out the fascinating problems of locating and planting for the permanent home right on the spot. The controversy over the choice of a heating system is continued, and grows hotter each month. Another installment of "The Naturalization of a City Man" follows, in which the narrative "gets down to brass tacks" and gives you a whole lot of incidental information.



But here, we can't tell you about everything in the whole number—some of the many good things will remain prize packages, in the original wrappers, which may be opened on December 23rd.



By the way, last year's Building Number was out of print soon after publication. We're printing a big pile of the 1912 one; but if your subscription expires with December, or you are planning to buy it on the news-stands, you'd better fill out the coupon on the next page right now and make sure you will not miss it.



Just a Hint as to what is coming in Next Year's House & Garden



TRYING to tell you what HOUSE AND GARDEN is going to be during the coming twelve months is a good deal like setting a turkey dinner, with all the fixin's, before a famished street urchin—there's so much of it, that he hardly knows where to start in.

In a single issue of HOUSE AND GARDEN there are, on an average, fifteen major articles or pictorial features, and probably twice as many more minor ones in the departments and in the back of the magazine. If we were merely to enumerate the year's articles, in small type, there wouldn't be any space left on this page to tell you how good they are.

Then, too, there are some that are better than others—the real giants of the Contents Page. Take, for instance, the subject of building really good houses at low cost. That has, to judge from titles alone, been one of the most fully discussed subjects in many of the magazines of a certain class. Yet the subject matter under those alluring titles has, to say the least, left much to be desired. We think we have the real thing, however, for an architect has spent several years on this problem of building houses of brick and stucco for three thousand dollars. The houses are not mansions, to be sure, and they are necessarily—and happily—free from useless ornamentation, but they are mighty interesting examples of planning to save square inches and of a straightforward use of honest materials, outside and in. This particular architect has realized the fact that designing houses of such low cost does not pay the architect, but he has stooped to conquer one of the really great problems of modern building.

Do you know that the ant is such a true lover of country life that he keeps a cow? Do you know how the spider measures the angles across which he spins his web? Do you know all that you would like to know regarding the community life among bees? These are but a few of the subjects that will be presented in a remarkable series of articles on the broader side of that life that HOUSE AND GARDEN seeks to foster—the marvelous manifestations of nature.

If you have read "The Naturalization of a City Man" in this number you have started one of the most interesting serials that we have ever had in the magazine. It is an account of how a man went back to the land—his problems and how they were solved, not always at the first trial. It is just the sort of a narrative that will serve to guide any man who is thinking of breaking away from the city in an attempt to make the land support him and his family.

There are a number of gardening articles scheduled for early issues by Mr. F. F. Rockwell. Mr. Rockwell is a man who makes his living from the land, so that his description of the shortcuts and methods by which he makes the soil give the greatest return for his labor have a weight that the great majority of gardening writers, working only with the pen, can never have. The gardening side of HOUSE AND GARDEN will tend somewhat more towards the personal experience type of article rather than that of mere dogmatic instruction. The latter has its place—a place that cannot be taken by anything else, but we shall try always to show by picture and text just what has been accomplished by amateur gardeners. Their problems are your problems, and what they have solved you can solve and find a great joy in the doing.



The series describing Homes That Architects Have Built for Themselves continues through the coming months. You can always recognize an architect's own home. When he may carry out all of the ideas that seem too radical for his clients the result is sure to be interesting, and it is sometimes startling. Undoubtedly this collection of homes has more claim to real distinction than any like number the country over. They will win you over to the reasonableness of certain unconventional ways of building.

We are beginning to appreciate more fully the possibilities that lie in remodeling old farmhouses for modern life. Our photographers have been scouring Connecticut, New Jersey and Long Island particularly, and have reaped a great harvest of pictures that show some astounding transformations. One of our staff has just finished remodeling for his own use a house dating from 1802, in which he has met and solved more problems than he could begin to tell about in several complete issues of the magazine. There are some particularly valuable suggestions in his experience for those who have the desire to go and do likewise, and he was forehanded enough to secure a complete set of "before" pictures.

After the Annual Building Number, described more in detail on the opposite page, it is but a short jump to the April Gardening Guide—a vast fund of information and new ideas with the finest pictures that our photographers can gather all over the country; in June comes the Summer Home Number; October brings the Fall Planting and Furnishing Number, showing how to gain a year in the making of your garden as well as the season's advance in interior decoration and furnishing—four great special issues that are absolutely indispensable.



It has been possible here to give but the most hasty glance over the magazine for 1912. The details of the notable articles that are to come must be reserved for further announcements. It remains but for you to ask yourself whether you can possibly afford to miss the inspiration and constant help that HOUSE AND GARDEN will carry to its readers through the coming year. If you have not already done so, take this opportunity to renew your subscription, to make sure that you do not miss a single one of the monthly treats in store for you. Use the coupon below and provide right now for the twelve visits of a magazine that is a guide and an inspiration to all those who would have their homes and their outdoor surroundings notable in their beauty, comfort and good taste.

McBRIDE, NAST & Co.,

31 East 17 street, New York City.

Please ☐ enter ☐ continue my subscription to HOUSE AND GARDEN for one year, starting with the Annual Building Number for January, for which I enclose for \$3.

Name

Address

Acceptable and Appropriate Books for Presents

—WINSTON SERIES—

PHOTOGRAVURE BOOKS

Recognized as Among the Finest Books Made

THESE handsome volumes, more than 60 in number, have been designed to appeal to the taste of those desiring the best in book making. Classics of literature, history and standard works, travel and description, such as "The French Revolution," "Romola," "Lorna Doone," "The Mediterranean and Its Borderlands," "Switzerland," "Florence," "Venice," "London," "Paris," "Scotland," etc. Printed on the finest ivory-finished paper, illustrated by numerous photogravures and maps; bound in the finest Italian style, and sold in cloth boxes to match. These works are published in one, two, three and five volume sets, and the bindings are in rich Cloth, Three-Quarter Morocco, and Full Crushed Levant, handsomely tooled. Prices range from \$3.00 per volume to \$7.50 per volume.

SOLD BY ALL BOOKSELLERS.

CATALOG SENT ON REQUEST.



Q. A proper climax to a successful year and a fitting pacemaker for 1912---that's the DECEMBER OUTING.

Q. There's "HOW TO RAISE YOUR OWN QUAIL" by H. K. Job, "THE FLIGHT OF BULLETS" by Horace Kephart, "CAMERA ADVENTURES" by A. W. Dimock and "TAKING CARE OF FRUIT" by E. P. Powell.

Q. Not forgetting a corking elephant hunt in Ceylon and a picturesque winter trip to a deserted village--all this with the first installment of a new serial "FOOT LOOSE AND FREE" by Stephen Chalmers--short stories besides.

Q. Keep in touch with the best there is in out-door life--Add OUTING to your list of magazines for 1912 for \$2.50. All news-stands 25 cents; \$3.00 a year.

OUTING PUBLISHING COMPANY
OUTING MAGAZINE
215 FIFTH AVENUE NEW YORK CITY-1115
PEOPLES GAS BLDG. CHICAGO



The STORY-LIFE of WASHINGTON

By WAYNE WHIPPLE,
Author of "The Story-Life of Lincoln."

It is a new kind of history. "It marks a new era in fascinating biography," says the NEW YORK TIMES.

THE REAL FLESH AND BLOOD WASHINGTON is given in these 500 short stories drawn from every authentic source. They comprise the best that has ever been written about the First and Greatest American. They are so woven together as to present a connected biography and a History of our struggle for independence and the establishment of the Nation.

Two handsome volumes of 709 pages, beautifully illustrated by reproductions of the masterpieces of American painting which bear on Washington's life, together with modern pictures by Howard Pyle and others. 48 plates in two colors. Price, in Cloth Binding, \$3.00 Net.

The Story-Life of Lincoln

A previously issued volume by the same author, treating the Life of Lincoln in similar manner to the Life of Washington. One volume, 700 pages, 150 illustrations. Cloth Binding, Price \$1.75

The Real Palestine of To-Day

BY LEWIS GASTON LEARY. The work is written not merely from a scenic standpoint, but is full of the human interest of the people of Palestine, the most historic and romantic country on earth. To the person without the means or time to travel the book will prove immensely entertaining, and to travelers a complete and convenient guide. Handsomely Bound in Cloth, Price \$1.00 Net.



The Flying Boys Series

By—
EDWARD S. ELLIS

"The Flying Boys in the Sky" and "The Flying Boys to the Rescue"—Fascinating stories of adventure in Aeroplanes. 2 vols. Cloth. 8 illustrations. Price 60 cents per volume.

The Ranch Girls Series

By MARGARET
VANDERCOOK

First Volume: "The Ranch Girls at Rainbow Lodge."

A Clever Western Ranch Story of girls who inherit a ranch and make good at running it. Cloth. 4 illustrations. Price 60 cents.



FOR SALE BY ALL BOOKSELLERS OR SENT POSTPAID ON RECEIPT OF PRICE

THE JOHN C. WINSTON COMPANY

Publishers of "International" Bibles

Winston Building, Philadelphia, Pa.

TERRA COTTA



SEND for Catalogue showing Flower Boxes, Pots, Vases, Jardinieres, Etc. Made of Strong, Durable Terra Cotta. Suitable for use in the house or Garden Decoration.

GALLOWAY TERRA COTTA CO.
3218 WALNUT ST. PHILADELPHIA.

LET US HELP YOU

Our experienced landscape gardeners make a planting plan of your place, selecting trees, shrubs, etc., suitable to soil and situation. Our nurseries (more than 600 acres) offer the finest selection in America for lawn and garden planting. Write for Catalog D.
STEPHEN HOYT'S SON COMPANY
Est. 1848. Inc. 1903
New Canaan, Conn.



If You Have a Dog

You Should Read

FIELD AND FANCY

the only weekly in America devoted exclusively to the dog. Sample and Special Trial subscription Offer on application.

FIELD AND FANCY, 14 Church St., New York City

BUFF ORPINGTONS

Are the Greatest
Utility Breed

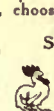


To make room for growing stock I will dispose of this year's breeders at very attractive prices.

Now is the time to arrange for your next season's Pens—I have quantities of exceptional chicks to choose from.

"Champion New Yorker"
1st Prize Cock at
Madison Sq. and Boston
1911

The "Joe-Pye Book," 20
pages illustrated, sent
on request



Stock and Eggs for Sale

JOE-PYE

South Norwalk, Conn.
R. F. D. 37

NA
7100
H6
v.20

House & garden

PLEASE DO NOT REMOVE
CARDS OR SLIPS FROM THIS POCKET

UNIVERSITY OF TORONTO LIBRARY
